SUMMARY

- The Advisory Committee on Immunization Practices (ACIP) has issued new recommendations for pneumococcal vaccination of adults.
- Adults aged 65 years or older who have not previously received any pneumococcal vaccine or whose vaccination history is unknown should receive a dose of the pneumococcal conjugate vaccine (PCV13, Prevnar-13®), followed 6-12 months later by a dose of the pneumococcal polysaccharide vaccine (PPSV23, Pneumovax®23).
- Adults 65 years of age or older who have previously received PPSV23, on or after age 65 years, should receive PCV13 at least 1 year after their most recent dose of PPSV23.
  - Adults who received PPSV23 before age 65 years should receive PCV13 on or after age 65 years and at least 1 year after the dose of PPSV23, followed by a second dose of PPSV23 6 to 12 months after the dose of PCV13, and at least 5 years after the first dose of PPSV23.
- Refer to algorithm on page 4 of this document.
- Currently, Medicare Part B covers only one dose of pneumococcal vaccine, either PCV13 or PPSV23 but not both, for adults 65 years of age or older.
- Healthcare providers should not hesitate to administer PCV13 vaccine to adults 65 years of age or older who have not previously received any pneumococcal vaccine or whose vaccination history is unknown.
- Healthcare providers should discuss with previously-vaccinated patients the risks and benefits of administering PCV13 vaccine at this time versus deferring vaccination until such time as it is covered by Medicare.

New Recommendations for Pneumococcal Vaccination of Adults Aged 65 Years or Older

On September 19, 2014, the Centers for Disease Control and Prevention (CDC) published new ACIP recommendations for pneumococcal vaccination of adults. Adults aged 65 years or older are now recommended to be vaccinated with the pneumococcal conjugate vaccine (PCV13, Prevnar-13®) first and then be vaccinated with the pneumococcal polysaccharide vaccine (PPSV23, Pneumovax®23) 6-12 months later. The two vaccines should not be co-administered, and the minimum acceptable interval between PCV13 and PPSV23 is 8 weeks. Adults 65 years
of age or older who have previously received PPSV23 should receive PCV13 at least 1 year after their most recent dose of PPSV23. The full ACIP statement is available online at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6337a4.htm.

Both PCV13 and PPSV23 provide good protection against invasive forms of pneumococcal infection. Although PPSV23 protects against more serotypes than does PCV13, studies do not consistently show effectiveness of PPSV23 against non-invasive pneumococcal pneumonia. PCV13 helps to fill the gap in protection against non-invasive pneumococcal pneumonia. The results of a large randomized placebo-controlled trial evaluating efficacy of PCV13 against community-acquired pneumonia among adults 65 years or older (CAPiTA trial) demonstrated 45% efficacy of PCV13 against vaccine-type community-acquired pneumococcal pneumonia and 75% efficacy against vaccine-type invasive pneumococcal disease.

ACIP recommendations for use of PCV13 and PPSV23 in adults aged 19 years or older with certain high-risk conditions remain unchanged.

**Insurance Coverage for Pneumococcal Vaccines**
Currently, Medicare Part B covers only one dose of pneumococcal vaccine, either PCV13 or PPSV23, but not both, for adults 65 years of age or older. The Centers for Medicare and Medicaid Services (CMS) have indicated that it would likely take a minimum of one year to enact a policy change for Medicare to cover both PCV13 and PPSV23 vaccines.

Under current coverage, Medicare Part B **will** cover PCV13 vaccine for adults 65 years of age or older who have not previously received any pneumococcal vaccines or whose previous vaccination history is unknown. Healthcare providers should not hesitate to vaccinate such patients with PCV13 vaccine. However, Medicare does not currently cover PCV13 vaccine for adults 65 years of age or older with a documented history of PPSV23 vaccination. Healthcare providers should discuss, with previously-vaccinated patients, the risks and benefits of administering PCV13 vaccine at this time versus deferring vaccination until such time that it is covered by Medicare.

For patients with private insurance coverage, providers should check with individual insurance plans. Insurance companies have up to one year to include coverage based on new ACIP recommendations. However, the recommendation for use of PCV13 in immunocompromised adults has been out for more than a year, so these individuals likely are already covered.

**Potential Time-Limited Utility of Routine PCV13 Use Among Adults ≥65 Years.**
The ACIP will assess the implementation and impact of the recommendation for PCV13 use among adults 65 years or older, including uptake of PCV13 and PPSV23 and impact on PCV13-type invasive pneumococcal burden and community-acquired pneumonia. Indirect effects of PCV13 use among children may further reduce the remaining burden of adult pneumococcal disease caused by PCV13-types. If PCV13 use among children virtually eliminates PCV13 serotypes from circulating in the United States, there may not be long-term utility of routine use of PCV13 among adults. Therefore, the ACIP has indicated that the recommendations for routine PCV13 use among adults aged ≥65 years will be reevaluated in 2018 and revised as needed.
Summary of Pneumococcal Vaccine Recommendations for Adults

PCV13 is recommended for:

- All adults 65 years or older;
- Adults 19 years or older with sickle cell disease, asplenia, immunocompromising conditions, cerebrospinal fluid leak or cochlear implant; and
- Adults 19 years or older who are immunocompromised, including those with HIV infection.

PPSV23 is recommended for:

- All adults 65 years or older;
- Adults 19 years or older with chronic health conditions such as heart disease, lung disease (including asthma), sickle cell disease, diabetes, alcoholism, and cirrhosis;
- Adults 19 years or older who are immunocompromised, including those with HIV infection; and
- Adults who smoke cigarettes.

<table>
<thead>
<tr>
<th>Risk group</th>
<th>Underlying medical condition</th>
<th>PCV13 Recommended</th>
<th>PPSV23 Recommended</th>
<th>Revaccination 5 yrs after first dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunocompetent persons</td>
<td>Chronic heart disease(^1)</td>
<td>v</td>
<td>v</td>
<td>v</td>
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<tr>
<td></td>
<td>Chronic lung disease(^2)</td>
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<td>Diabetes mellitus</td>
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<td></td>
<td>Cerebrospinal fluid leak</td>
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<td>Cochlear implant</td>
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<td></td>
<td>Alcoholism</td>
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<tr>
<td></td>
<td>Chronic liver disease, cirrhosis</td>
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<td></td>
<td>Cigarette smoking</td>
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<td>Persons with functional or anatomic asplenia</td>
<td>Sickle cell disease/other hemoglobinopathy</td>
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<td>Congenital or acquired asplenia</td>
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<tr>
<td>Immunocompromised persons</td>
<td>Congenital or acquired immunodeficiency(^3)</td>
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<td></td>
<td>Human immunodeficiency infection</td>
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<td></td>
<td>Chronic renal failure</td>
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<td>Nephrotic syndrome</td>
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<td>Leukemia</td>
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<td>Lymphoma</td>
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<td>Hodgkin disease</td>
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<td>Generalized malignancy</td>
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<td>Iatrogenic immunosuppression(^4)</td>
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<td>Solid organ transplant</td>
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<td>Multiple myeloma</td>
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</tbody>
</table>

\(^1\) All adults aged ≥65 years should receive a dose of PPSV23, regardless of previous history of vaccination with pneumococcal vaccine.

\(^2\) Including congestive heart failure and cardiomyopathies, excluding hypertension.

\(^3\) Includes B- (humoral) or T-lymphocyte deficiency, complement deficiencies (particularly C1, C2, C3, and C4 deficiencies), and phagocytic disorders (excluding chronic granulomatous disease).

\(^4\) Diseases requiring treatment with immunosuppressive drugs, including long-term systemic corticosteroids and radiation therapy.
BOX. Sequential administration and recommended intervals for PCV13 and PPSV23 for adults aged ≥65 years — Advisory Committee on Immunization Practices, United States

**Pneumococcal vaccine-naïve persons aged ≥65 years**

- PCV13 at age ≥65 years → PPSV23
  - 6–12 months*

**Persons who previously received PPSV23 at age ≥65 years**

- PPSV23 already received at age ≥65 years → PCV13
  - ≥1 years

**Persons who previously received PPSV23 before age 65 years who are now aged ≥65 years**

- PPSV23 already received at age <65 years → PCV13 at age ≥65 years → PPSV23
  - ≥1 years
  - 6–12 months*
  - ≥5 years

**Abbreviations:** PCV13 = 13-valent pneumococcal conjugate vaccine; PPSV23 = 23-valent pneumococcal polysaccharide vaccine.
*Minimum interval between sequential administration of PCV13 and PPSV23 is 8 weeks; PPSV23 can be given later than 6–12 months after PCV13 if this window is missed.
ADDITIONAL INFORMATION


Other resources on pneumococcal vaccine recommendations are available at:

- CDC. Adults: Protect Yourself with Pneumococcal Vaccine. Available online at: http://www.cdc.gov/features/adult-pneumococcal/

For further information, please email immunize@health.ny.gov or contact your local health department or your regional New York State Department of Health Bureau of Immunization representative at the following:

**Western Regional Office**
Buffalo / Rochester: 716 – 847 – 4501

**Capital District Regional Office**
Albany: 518 – 473 – 4437

**Central New York Regional Office**
Syracuse: 315 – 477 – 8164

**Metropolitan Area Regional Office**
New Rochelle: 914 – 654 – 7149
Central Islip: 631 – 851 – 3096
Monticello: 845 – 794 – 2045