Influenza

Administer the vaccine once annually when it becomes available each season.

Revaccination later in the season is not recommended if already vaccinated.

Inactivated influenza vaccine (IIVs) and recombinant influenza vaccines (RIV) may be administered with other inactivated or live vaccines.

When vaccine supply is limited, focus on higher risk persons aged ≥50 years: chronic pulmonary or CV disease, (excluding isolated hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus), immunocompromised status, residents of LTCFs, Native Americans/Alaska Natives. Quadrivalent flu vaccines are designed to protect against four strains of flu viruses (two influenza A strains, two influenza B strains); while the trivalent is designed to protect against three strains (two influenza A strains, 1 influenza B strain).

It is acceptable to give standard dose vaccine to the elderly; however, the “high dose” has been associated with a stronger immune response following vaccination and better effectiveness than standard dose flu vaccine – see table below.

<table>
<thead>
<tr>
<th>Trade Name [Manufacturer]</th>
<th>Presentation</th>
<th>Age</th>
<th>HA, µG/dose (each virus)</th>
<th>Egg-grown virus, Cell culture-grown virus, or Recombinant HA/Adjuvanted (Yes/No)/Latex Yes/No</th>
<th>Thimerosal Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluad Seqirus (allIV3)</td>
<td>0.5 mL prefilled syringe</td>
<td>≥65 yrs</td>
<td>15</td>
<td>Egg/Yes/No</td>
<td>No</td>
</tr>
<tr>
<td>Fluzone High-Dose Sanofi Pasteur (HD-IIV3)* licensed specifically for people 65 years and older.</td>
<td>0.5 mL prefilled syringe</td>
<td>≥65 yrs</td>
<td>60</td>
<td>Egg/No/No</td>
<td>No</td>
</tr>
<tr>
<td>Flublok Quadrivalent Sanofi Pasteur</td>
<td>0.5 mL prefilled syringe</td>
<td>≥18 yrs</td>
<td>45</td>
<td>No/Recombinant/No</td>
<td>No</td>
</tr>
</tbody>
</table>

Tdap, Td

Schedule: Give adults one dose of Td every 10 years. For adults who have never received Tdap, a dose of Tdap can replace one dose of 10-year Td booster. Clinicians can give Tdap regardless of the time since the patient’s most recent Td vaccination. (Note: When feasible, Boostrix® should be used for adults 65 years or older; however, either vaccine product administered to a person 65 years or older is appropriate. Providers should not miss an opportunity to vaccinate persons aged 65 years or older with Tdap. Therefore, providers may administer the Tdap vaccine they have available.)

MMR

Schedule: Adults born in 1957 or later without acceptable evidence of immunity to measles, mumps, or rubella should receive 1 dose of measles, mumps, and rubella vaccine (MMR) unless they have a medical contraindication to the vaccine (e.g. severe immunodeficiency). Special situations;

- HIV infection with CD4 count ≥200 cells/µL for at least 6 months and no evidence of immunity to measles, mumps, or rubella: 2-dose series MMR at least 4 weeks apart; contraindicated in HIV infection with CD4 count <200 cells/µL
- Severe immunocompromising conditions: MMR contraindicated
- Health care personnel born in 1957 or later with no evidence of immunity to measles, mumps, or rubella: 2-dose series MMR at least 4 weeks apart for measles or mumps, or at least 1 dose MMR for rubella; if born before 1957, consider 2-dose series MMR at least 4 weeks apart for measles or mumps, or 1 dose MMR for rubella
Zoster

Shingrix® (RZV) preferred over Zostavax® (ZVL) by CDC.
Coadministration: Able to be given with Influenza and Pneumonia vaccinations at the same appointment
Current infection: Administer Shingrix® once rash has resolved but do not wait until neuropathy has resolved. Shringrix reduces neuropathic pain during and after infection.
Schedule:
- Age 50 years or older: 2-dose series RZV 2–6 months apart (minimum interval: 4 weeks; repeat dose if too soon) regardless of previous herpes zoster or previously received ZVL (administer RZV at least 2 months after ZVL)
- Age 60 years or older: 2-dose series RZV 2–6 months apart (minimum interval: 4 weeks; repeat dose if too soon) or* 1 dose ZVL if not previously vaccinated (if previously received ZVL, administer RZV at least 2 months after ZVL
*Zostavax may still be used to prevent shingles in healthy adults 60 years and older. Zostavax may be used if a person is allergic to Shingrix, prefers Zostavax, or requests immediate vaccination and Shingrix is unavailable.

Pneumococcal

PCV13 should not be routinely administered to all immunocompetent adults over 65 years of age. Administration requires shared clinical decision making based on potential exposure to PCV13-type illness.
- Settings with increased risk of PCV13-type illness:
  - Post-Acute, Long-term Care Facilities
  - Areas with low childhood PCV13 vaccination rates (whether residing in or traveling to)
- Disease states with increased risk of PCV13-type illness:
  - Chronic heart, lung, or liver disease
  - Diabetes
  - Alcoholism
  - Smoking
  - Two or more chronic medical conditions
PCV13 should be administered to all immunocompromised adults over 65 and those with CSF leaks or cochlear implants.
Administer PCV13 or PPSV23, according to the following dosing information and schedule:
- PCV13 must be administered by IM route
- PPSV23 may be administered either by IM or SQ

<table>
<thead>
<tr>
<th>Vaccine(s) Indicated</th>
<th>History of prior vaccination</th>
<th>Schedule for Administration of PCV13 and PPSV23 after age 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPSV23 and PCV13</td>
<td>Naïve or unknown</td>
<td>Administer PCV13 then PPSV23 one year later</td>
</tr>
<tr>
<td></td>
<td>PPSV23 when &lt;65 or unknown PCV13</td>
<td>Administer PCV13 at least 1 year after previous PPSV23. Administer another PPSV23 at least 5 years after previous dose of PPSV23 and at least 1 year after PCV13</td>
</tr>
<tr>
<td></td>
<td>PPSV23 when &lt;65; PCV13 after 65</td>
<td>Administer another PPSV23 at least 5 years after previous dose of PPSV23 and at least 1 year after PCV13</td>
</tr>
<tr>
<td></td>
<td>PPSV23 when &gt;65, or unknown PCV13</td>
<td>Administer PCV13 at least 1 year after PPSV23</td>
</tr>
<tr>
<td>PPSV23 only</td>
<td>Naïve or unknown &gt;65</td>
<td>Administer one dose PPSV23</td>
</tr>
<tr>
<td></td>
<td>PPSV23 &lt;65</td>
<td>Administer one dose PPSV23 &gt;5 years after first dose</td>
</tr>
</tbody>
</table>

*For adults >65 with immunocompromising conditions, functional or anatomic asplenia, cerebrospinal fluid leaks, or cochlear implants, the interval between PC13 and PPSV23 should be shortened to 8 weeks.