## Table 2: Recommended Adult Immunization Schedule by Medical Condition and Other Indications
United States, 2019

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Pregnancy</th>
<th>Immuno-compromised (excluding HIV infection)</th>
<th>HIV infection CD4 count</th>
<th>Asplenia, complement deficiencies</th>
<th>End-stage renal disease, on hemodialysis</th>
<th>Heart or lung disease, alcoholism</th>
<th>Chronic liver disease</th>
<th>Diabetes</th>
<th>Health care personnel</th>
<th>Men who have sex with men</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIV or RIV or LAIV</td>
<td>CONTRAINDIATED</td>
<td></td>
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<tr>
<td>Tdap or Td</td>
<td>1 dose Tdap each pregnancy</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>1 dose annually or</td>
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<tr>
<td>MMR</td>
<td>CONTRAINDIATED</td>
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<td></td>
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<tr>
<td>VAR</td>
<td>CONTRAINDIATED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 doses</td>
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<tr>
<td>RZV (preferred)</td>
<td>DELAY</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>2 doses at age ≥50 yrs or</td>
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<tr>
<td>ZVL</td>
<td>CONTRAINDIATED</td>
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<td></td>
<td></td>
<td>1 dose at age ≥60 yrs or</td>
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<tr>
<td>HPV Female</td>
<td>DELAY</td>
<td>3 doses through age 26 yrs</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>2 or 3 doses through age 26 yrs</td>
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<tr>
<td>HPV Male</td>
<td></td>
<td>3 doses through age 26 yrs</td>
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<td></td>
<td></td>
<td></td>
<td>2 or 3 doses through age 21 yrs or 2 or 3 doses through age 26 yrs</td>
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<tr>
<td>PCV13</td>
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<td></td>
<td></td>
<td>1 dose</td>
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<tr>
<td>PPSV23</td>
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<td></td>
<td></td>
<td>1, 2, or 3 doses depending on age and indication</td>
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<tr>
<td>HepA</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 or 3 doses depending on vaccine</td>
</tr>
<tr>
<td>HepB</td>
<td></td>
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<td></td>
<td></td>
<td>2 or 3 doses depending on vaccine</td>
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<tr>
<td>MenACWY</td>
<td></td>
<td>1 or 2 doses depending on indication, then booster every 5 yrs if risk remains</td>
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<tr>
<td>MenB</td>
<td>PRECAUTION</td>
<td>2 or 3 doses depending on vaccine and indication</td>
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<td></td>
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<tr>
<td>Hib</td>
<td>3 doses HSCT* recipients only</td>
<td>1 dose</td>
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</tbody>
</table>

1. Precaution for LAIV does not apply to alcoholism. 2. See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations. 3. Hematopoietic stem cell transplant.

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*HSCT: Hematopoietic stem cell transplant.*

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**End-stage renal disease, on hemodialysis:**
- Participates in predialysis or dialysis training program
- Hematopoietic stem cell transplant (HSCT) recipients

**Asplenia:**
- History of infection with encapsulated organisms
- Pneumococcal disease
- Sinusitis
- Osteomyelitis
- Infection with encapsulated organisms

**HIV infection:**
- CD4 count: >200 cells/µL
- CD4 count: ≤200 cells/µL

**Chronic liver disease:**
- Chronic hepatitis B
- Chronic hepatitis C
- Cirrhosis

**Heart or lung disease:**
- History of heart disease
- History of lung disease
- History of asthma

**Alcoholism:**
- Active alcohol use

**Diabetes:**
- Type 1 diabetes
- Type 2 diabetes

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**Influenza Vaccine:**
- LAIV (Influenza Vaccine): Indicated for all adults 50 years of age and older, including those with chronic medical conditions, pregnant women, and people with underlying conditions that increase the risk of serious influenza complications.

**Varicella Vaccine:**
- Indicated for all adults 13 years of age and older who have not been vaccinated previously, or who have not had varicella vaccine and have no documented history of varicella.

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**Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection:**
- 1 dose annually

**Recommended vaccination for adults with an additional risk factor or another indication:**
- 1 dose annually

**Precaution—vaccine might be indicated if benefit of protection outweighs risk of adverse reaction:**
- Delay vaccination until after pregnancy if vaccine is indicated

**Contraindicated—vaccine should not be administered because of risk for serious adverse reaction:**
- No recommendation