Staff can easily become confused about vaccines within the storage unit because there are so many brands and formulations available. Labeling the area where vaccines are stored can help staff quickly locate and choose the correct vaccine—perhaps preventing a vaccine administration error. Depending on how vaccines are organized within the storage unit, labels can be placed on containers or bins or directly attached to shelves where vaccines are placed. Other helpful strategies to prevent vaccine administration errors include color coding labels (e.g., one color for pediatric and another for adult vaccines) and providing additional information such as age indications or other information unique to the vaccine.

In addition, some vaccines must be reconstituted before administration. These vaccines have two components—a lyophilized vaccine and diluent that must be mixed together. The lyophilized vaccine should only be reconstituted or mixed using the diluent supplied by the manufacturer. Consider posting reminders or labeling vaccines to remind staff to reconstitute certain vaccines prior to administration.

The following labels are examples that may be used to help organize vaccines. Labels are based on recommendations from the Advisory Committee on Immunization Practices (ACIP) and may include indications different from those of the Food and Drug Administration. The Centers for Disease Control and Prevention (CDC) also recommends vaccines be stored in the original packaging to protect contents from light, to help maintain the recommended temperature range, and to help prevent administration errors.

Note: Some vaccine preparations are being transitioned from vials and prefilled syringes that contain latex (natural rubber) to vials and prefilled syringes that are not made with natural rubber latex. Read the package insert that accompanies the product to check for the presence of natural rubber or latex.
# Diphtheria and Tetanus Toxoid- and acellular Pertussis-containing Vaccines

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Ages</th>
<th>Use for</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DTaP (Daptacel)</strong></td>
<td>6 weeks through 6 years</td>
<td>Any dose in the series</td>
<td>Intramuscular (IM) injection</td>
</tr>
</tbody>
</table>
| **DTaP-IPV (Kinrix)** | 4 years through 6 years | DTaP dose #5, IPV dose #4 | Intramuscular (IM) injection  
  Do NOT use for DTaP doses 1 through 4 OR IPV doses 1 through 3 |
| **DTaP (Infanrix)** | 6 weeks through 6 years | Any dose in the series | Intramuscular (IM) injection |
| **DTaP-IPV-HepB (Pediarix)** | 6 weeks through 6 years | DTaP and IPV: Doses #1, #2, and/or #3, HepB: Any dose in the series | Intramuscular (IM) injection  
  Do NOT use for HepB birth dose |

Syringe tip cap of prefilled syringe contains latex.
### DTaP-IPV/Hib (Pentacel)

**Ages:** 6 weeks through 4 years  
**Use for:**  
- DTaP and IPV: Doses #1, #2, #3, and/or #4  
- Hib: Any dose in the series  
**Route:** Intramuscular (IM) injection  

*Reconstitute Hib powder ONLY with manufacturer-supplied DTaP-IPV liquid diluent  
Should be used immediately after reconstitution  
Do NOT administer DTaP-IPV w/o Hib*

### DTaP-IPV (Quadracel)

**Ages:** 4 years through 6 years  
**Use for:**  
- DTaP dose #5  
- IPV dose #4 or #5  
  
  *Do NOT use for DTaP doses 1 through 4 OR IPV doses 1 through 3*  
**Route:** Intramuscular (IM) injection
<table>
<thead>
<tr>
<th>Vaccine Type</th>
<th>Ages</th>
<th>Use for</th>
<th>Route</th>
<th>Reconstitution Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hib (ActHIB)</td>
<td>6 weeks through 4 years</td>
<td>Any dose in the series</td>
<td>Intramuscular (IM) injection</td>
<td>Reconstitute Hib powder ONLY with manufacturer-supplied 0.4% sodium chloride diluent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Beyond Use Time: If not used immediately after reconstitution, store at 2°C to 8°C (36°F to 46°F) and discard if not used within 24 hours. Should be shaken vigorously before injection.</td>
</tr>
<tr>
<td>Hib (PedvaxHIB)</td>
<td>6 weeks through 4 years</td>
<td>Any dose in the series</td>
<td>Intramuscular (IM) injection</td>
<td>Vial stopper contains latex</td>
</tr>
<tr>
<td>Hib (Hiberix)</td>
<td>6 weeks through 4 years</td>
<td>Any dose in the series</td>
<td>Intramuscular (IM) injection</td>
<td>Reconstitute Hib powder ONLY with manufacturer-supplied 0.9% sodium chloride diluent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Beyond Use Time: If not used immediately after reconstitution, store at 2°C to 8°C (36°F to 46°F) and discard if not used within 24 hours. Should be shaken vigorously before injection.</td>
</tr>
<tr>
<td>Vaccine</td>
<td>Ages</td>
<td>Use for</td>
<td>Route</td>
<td>Note</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>----------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>HepA (Havrix)-Pediatric Formulation</td>
<td>12 months through 18 years</td>
<td>Any dose in the series</td>
<td>Intramuscular (IM) injection</td>
<td>Syringe tip cap of prefilled syringe contains latex</td>
</tr>
<tr>
<td>HepB (Engerix-B)-Pediatric Formulation</td>
<td>Birth through 19 years</td>
<td>Any dose in the series</td>
<td>Intramuscular (IM) injection</td>
<td>Syringe tip cap of prefilled syringe contains latex</td>
</tr>
<tr>
<td>HepA (Vaqta)-Pediatric Formulation</td>
<td>12 months through 18 years</td>
<td>Any dose in the series</td>
<td>Intramuscular (IM) injection</td>
<td>Vial stopper and syringe plunger stopper and tip cap contain latex</td>
</tr>
<tr>
<td>HepB (Recombivax HB)-Pediatric Formulation</td>
<td>Birth through 19 years</td>
<td>Any dose in the series</td>
<td>Intramuscular (IM) injection</td>
<td>Vial stopper and syringe plunger stopper and tip cap contain latex</td>
</tr>
</tbody>
</table>
Hepatitis Vaccines

**HepA (Havrix)-Adult Formulation**
- **Ages:** 19 years and older
- **Use for:** Any dose in the series
- **Route:** Intramuscular (IM) injection

*Syringe tip cap of prefilled syringe contains latex*

**HepA (Vaqta)-Adult Formulation**
- **Ages:** 19 years and older
- **Use for:** Any dose in the series
- **Route:** Intramuscular (IM) injection

*Vial stopper and syringe plunger stopper and tip cap contain latex*

**HepB (Engerix-B)-Adult Formulation**
- **Ages:** 20 years and older
- **Use for:** Any dose in the series
- **Route:** Intramuscular (IM) injection

*Syringe tip cap of prefilled syringe contains latex*

**HepB (Recombivax HB)-Adult Formulation**
- **Ages:** 20 years and older
- **Use for:** Any dose in the series
- **Alternate Adolescent Schedule for 11 through 15 year olds:** Two 1 mL doses 4 to 6 months apart
- **Route:** Intramuscular (IM) injection

*Vial stopper and syringe plunger stopper and tip cap contain latex*
<table>
<thead>
<tr>
<th><strong>HepA-HepB (Twinrix)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ages:</strong></td>
</tr>
<tr>
<td><strong>Contains:</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Schedule:</strong></td>
</tr>
<tr>
<td><strong>Alternate Schedule:</strong></td>
</tr>
<tr>
<td><strong>Route:</strong></td>
</tr>
</tbody>
</table>

*Syringe tip cap of prefilled syringe contains latex*
9vHPV (Gardasil 9)

Use for: 9 years through 26 years
Recommended ages: 11 years or 12 years
Catch-up ages: 13 years through 26 years
Route: Intramuscular (IM) injection
Measles Mumps Rubella Vaccine

MMR (M-M-R II)

Ages: 12 months and older
Use for: Any dose in the series
Route: Subcutaneous (subcut) injection

Reconstitute MMR powder ONLY with manufacturer-supplied sterile water diluent

Beyond Use Time: If not used immediately after reconstitution, store in vaccine vial in dark place at 2°C to 8°C (36°F to 46°F) and discard if not used within 8 hours.
Meningococcal Vaccines

**MenACWY-D (Menactra)**

**Ages:** 9 months and older  
(certain persons 56 years and older at increased risk)

**Use for:** Any dose in the series

**Route:** Intramuscular (IM) injection

---

**MenACWY-CRM (Menveo)**

**Ages:** 2 months and older

**Use for:** Any dose in the series

**Route:** Intramuscular (IM) injection

*Reconstitute the MenA lyophilized conjugate component ONLY with manufacturer-supplied MenCWY liquid conjugate component*

*Do NOT administer MenCWY w/o MenA*

*Beyond Use Time: Should be used immediately after reconstitution, but may be stored at or below 25°C (77°F) and discarded if not used within 8 hours.*
Meningococcal Vaccines

**MenB-4C (Bexsero)**

Ages: 10 years and older  
Use for: Any dose in the series  
Route: Intramuscular (IM) injection

*Bexsero and Trumenba are NOT interchangeable*  
*Complete series with same vaccine product*  
*Syringe tip cap of prefilled syringe contains latex*

**MenB-FHbp (Trumenba)**

Ages: 10 years and older  
Use for: Any dose in the series  
Route: Intramuscular (IM) injection

*Bexsero and Trumenba are NOT interchangeable*  
*Complete series with same vaccine product*
### Pneumococcal Vaccines

<table>
<thead>
<tr>
<th>PCV13 (Prevnar 13)</th>
<th>PPSV23 (Pneumovax 23)</th>
</tr>
</thead>
</table>
| **Ages:** All children 6 weeks through 5 years  
**Increased risk children** 6 years through 18 years who have never received PCV13  
**Increased risk adults** 19 years through 64 years who have never received PCV13  
**All adults 65 years and older** who have never received PCV13  
**Route:** Intramuscular (IM) injection | **Ages:** Healthy adults 65 years and older  
**Increased risk persons** 2 years through 64 years  
**Route:** Intramuscular (IM) injection OR Subcutaneous (subcut) injection  
*No more than two doses of PPSV23 recommended before 65th birthday and one dose at 65 years or older.* |

### Poliovirus Vaccine

<table>
<thead>
<tr>
<th>IPV</th>
</tr>
</thead>
</table>
| **Ages:** 6 weeks and older  
**Use for:** Any dose in the series  
**Route:** Intramuscular (IM) injection OR Subcutaneous (subcut) injection |
Rotavirus Vaccines

**RV1 (Rotarix)**

**Ages:** 6 weeks through 8 months, 0 days  
Maximum age for 1st dose is 14 weeks, 6 days  
Maximum age for last dose is 8 months, 0 days  
**Route:** Oral (PO)  
- Reconstitute RV1 powder ONLY with manufacturer-supplied sterile water/calcium chloride/xanthan diluent  
- Beyond Use Time: If not used immediately after reconstitution, store at 2°C to 8°C (36°F to 46°F) or at controlled room temperature up to 25°C (77°F) and discard if not used within 24 hours.  
  - Do NOT inject  
  - Tip cap of prefilled diluent oral applicator contains latex

**RV5 (RotaTeq)**

**Ages:** 6 weeks through 8 months, 0 days  
Maximum age for 1st dose is 14 weeks, 6 days  
Maximum age for last dose is 8 months, 0 days  
**Route:** Oral (PO)  
- Do NOT inject
### Tetanus and Diphtheria Toxoid-containing Vaccines

<table>
<thead>
<tr>
<th><strong>DT (generic)</strong></th>
<th><strong>Td (generic)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ages:</strong> 6 weeks through 6 years</td>
<td><strong>Ages:</strong> 7 years and older</td>
</tr>
<tr>
<td><strong>Use for:</strong> Primary series and booster doses <strong>ONLY</strong> for children with a contraindication or precaution to pertussis vaccine</td>
<td><strong>Use for:</strong> Primary series and booster doses for persons previously vaccinated with Tdap</td>
</tr>
<tr>
<td><strong>Route:</strong> Intramuscular (IM) injection</td>
<td><strong>Route:</strong> Intramuscular (IM) injection</td>
</tr>
</tbody>
</table>

### Td (Tenivac)

<table>
<thead>
<tr>
<th><strong>Ages:</strong> 7 years and older</th>
<th><strong>Use for:</strong> Primary series and booster doses for persons previously vaccinated with Tdap</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Route:</strong> Intramuscular (IM) injection</td>
<td><strong>Syringe tip cap of prefilled syringe may contain latex</strong></td>
</tr>
</tbody>
</table>
## Tdap (Adacel)

**Ages:** 7 years through 10 years  
**Use for:** A single dose if not fully vaccinated for pertussis  
**Ages:** 11 years and older  
**Use for:** A single dose*  
*Exceptions: 1 dose in each pregnancy; may receive 1 additional dose at 11 or 12 years if a dose received at 7-10 years  
**Route:** Intramuscular (IM) injection  
*Syringe tip cap of prefilled syringe may contain latex*

## Tdap (Boostrix)

**Ages:** 7 years through 10 years  
**Use for:** A single dose if not fully vaccinated for pertussis  
**Ages:** 11 years and older  
**Use for:** A single dose*  
*Exceptions: 1 dose in each pregnancy; may receive 1 additional dose at 11 or 12 years if a dose received at 7-10 years  
**Route:** Intramuscular (IM) injection  
*Syringe tip cap of prefilled syringe contains latex*
## Frozen Varicella-containing Vaccines

### VAR (Varivax)
- **Ages:** 12 months and older
- **Use for:** Any dose in the series
- **Route:** Subcutaneous (subcut) injection

**Reconstitute VAR powder ONLY with manufacturer-supplied sterile water diluent**

*Beyond Use Time: Discard reconstituted vaccine if not used within 30 minutes.*

### MMRV (ProQuad)
- **Ages:** 12 months through 12 years
- **Use for:** Any dose in the series
- **Route:** Subcutaneous (subcut) injection

**Reconstitute MMRV powder ONLY with manufacturer-supplied sterile water diluent**

*Beyond Use Time: Discard reconstituted vaccine if not used within 30 minutes.*

### ZVL (Zostavax)
- **Recommended ages:** 60 years and older
- **Use for:** Single dose
- **Route:** Subcutaneous (subcut) injection

**Reconstitute frozen ZVL powder ONLY with manufacturer-supplied sterile water diluent**

*Beyond Use Time: Discard reconstituted vaccine if not used within 30 minutes.*
RZV (Shingrix)

Ages:  50 years and older
Use for:  Immunocompetent adults aged 50 years and older
         Immunocompetent adults who previously received
         Zostavax (ZVL)
Route:  Intramuscular (IM) injection
         Refrigerate both components; Do NOT freeze
         Reconstitute lyophilized varicella zoster component
         with manufacturer supplied adjuvant suspension
Beyond Use Time:  Discard reconstituted vaccine if
         not used within 6 hours.
Reconstituted Vaccines

**DTaP-IPV/HIB (Pentacel)**
- Lyophilized Hib component
- Manufacturer’s DTaP-IPV liquid component
  - Pentacel vaccine

**Hib (ActHIB)**
- Lyophilized Hib component
- Manufacturer’s 0.4% sodium chloride diluent
  - ActHIB vaccine

**MMR (M-M-R II)**
- Lyophilized MMR component
- Manufacturer’s sterile water diluent
  - M-M-R II vaccine

**Hib (Hiberix)**
- Lyophilized Hib component
- Manufacturer’s 0.9% sodium chloride diluent
  - Hiberix vaccine

**Beyond Use Time:** If not used immediately after reconstitution, store at 2°C to 8°C (36°F to 46°F) and discard if not used within 24 hours. Should be shaken vigorously before injection.

**Should be used immediately after reconstitution:**
- Pentacel Hib component
- Manufacturer’s DTaP-IPV liquid component
- M-M-R II vaccine

**Should be used immediately after reconstitution:**
- Manufacturer’s 0.4% sodium chloride diluent
- Manufacturer’s 0.9% sodium chloride diluent
Reconstituted Vaccines

**MenACWY-CRM (Menveo)**

- Lyophilized MenA component
- MenCYW liquid component

Menveo vaccine

**Beyond Use Time:** Should be used immediately after reconstitution, but may be stored at or below 25°C (77°F) and discarded if not used within 8 hours.

**RV1 (Rotarix)**

- Lyophilized RV1 component
- Manufacturer’s sterile water-calcium carbonate-xanthan diluent

Rotarix vaccine

**Beyond Use Time:** If not used immediately after reconstitution, store at 2°C to 8°C (36°F to 46°F) or at controlled room temperature up to 25°C (77°F) and discard if not used within 24 hours.

Tip cap of prefilled diluent oral applicator contains latex.
Reconstituted Vaccines

**VAR (Varivax)**
- Lyophilized VAR component
- Manufacturer’s sterile water diluent
- Varivax vaccine

Beyond Use Time: Discard reconstituted vaccine if not used within 30 minutes.

**ZVL (Zostavax)**
- Lyophilized ZVL component
- Manufacturer’s sterile water diluent
- Zostavax vaccine

Beyond Use Time: Discard reconstituted vaccine if not used within 30 minutes.

**MMRV (ProQuad)**
- Lyophilized MMRV component
- Manufacturer’s sterile water diluent
- ProQuad vaccine

Beyond Use Time: Discard reconstituted vaccine if not used within 30 minutes.

**RZV (Shingrix)**
- Lyophilized varicella zoster component
- Manufacturer’s adjuvant suspension
- Shingrix vaccine

Refrigerate both components; Do NOT freeze
Beyond Use Time: Discard reconstituted vaccine if not used within 6 hours.