### Hepatitis B (HepB)

**Give IM**

- **Vaccinate all children age 0 through 18yrs.**
- **Vaccinate all newborns with monovalent vaccine prior to hospital discharge.** Give dose #2 at age 1–2m and the final dose at age 6–18m (the last dose in the infant series should not be given earlier than age 24wks). After the birth dose, the series may be completed using 2 doses of single-antigen vaccine or up to 3 doses of Comvax (ages 2m, 4m, 12–15m) or Pediarix (ages 2m, 4m, 6m), which may result in giving a total of 4 doses of hepatitis B vaccine.
- **If mother is HBsAg-positive:** give the newborn HBIG + dose #1 within 12hrs of birth; complete series at age 6m or, if using Comvax, at age 12–15m.
- **If mother’s HBsAg status is unknown:** give the newborn dose #1 within 12hrs of birth. If mother is subsequently found to be HBsAg positive, give infant HBIG within 7d of birth and follow the schedule for infants born to HBsAg-positive mothers.

### DTaP, DT (Diphtheria, tetanus, acellular pertussis)

**Give IM**

- **Give to children at ages 2m, 4m, 6m, 15–18m, 4–6yrs.**
- **May give dose #1 as early as age 6wks.**
- **May give #4 as early as age 12m if 6m have elapsed since #3 and the child is unlikely to return at age 15–18m.**
- **Do not give DTaP/DT to children age 7yrs and older.**
- If possible, use the same DTaP product for all doses.

### Td, Tdap (Tetanus, diphtheria, acellular pertussis)

**Give IM**

- **Give 1-time Tdap dose to adolescents age 11–12yrs if 5yrs have elapsed since last dose DTaP; then boost every 10yrs with Td.**
- **Give 1-time dose of Tdap to all adolescents who have not received previous Tdap. Special efforts should be made to give Tdap to people age 11yrs and older who are 1) in contact with infants younger than age 12m and 2) healthcare workers with direct patient contact.**
- In pregnancy, when indicated, give Td or Tdap in 2nd or 3rd trimester. If not administered during pregnancy, give Tdap in immediate postpartum period.

### Polio (IPV)

**Give SC or IM**

- **Give to children at ages 2m, 4m, 6–18m, 4–6yrs.**
- **May give dose #1 as early as age 6wks.**
- **Not routinely recommended for U.S. residents age 18yrs and older (except certain travelers).**

### Polio (OPV)

**Give SC or IM**

- **The final dose should be given on or after the 4th birthday and at least 6m from the previous dose.**
- **If dose #3 is given after 4th birthday, dose #4 is not needed if dose #3 is given at least 6m after dose #2.**

### Contraindications and precautions

**Contraindication**

- Previous anaphylaxis to this vaccine or to any of its components.

**Precaution**

- Moderate or severe acute illness.

---

*This document was adapted from the recommendations of the Advisory Committee on Immunization Practices (ACIP). To obtain copies of the recommendations, call the CDC-INFO Contact Center at (800) 232-4636; visit CDC’s website at www.cdc.gov/vaccines/pubs/ACIP-list.htm; or visit the Immunization Action Coalition (IAC) website at www.immunize.org/acip. This table is revised periodically. Visit IAC’s website at www.immunize.org/childrules to make sure you have the most current version.*
## Summary of Recommendations for Childhood and Adolescent Immunization

<table>
<thead>
<tr>
<th>Vaccine name and route</th>
<th>Schedule for routine vaccination and other guidelines</th>
<th>Schedule for catch-up vaccination and related issues</th>
<th>Contraindications and precautions</th>
</tr>
</thead>
</table>
| **Seasonal Influenza**  | • Vaccinate all children and teens age 6m through 18yrs.  
| Trivalent inactivated influenza vaccine (TIV)  
| Give IM  
| Live attenuated influenza vaccine (LAIV)  
| Give intranasally | | Contraindications  
| | • Previous anaphylaxis to this vaccine, to any of its components, or to eggs.  
| | • For LAIV only: age younger than 2yrs; pregnancy; chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurological/neuromuscular, hematologic, or metabolic (including diabetes) disorders; immunosuppression (including that caused by medications or HIV); for children and teens ages 6m through 18yrs, current long-term aspirin therapy; for children age 2 through 4yrs, wheezing or asthma within the past 12m, per healthcare provider statement.  
| | Precautions  
| | • Moderate or severe acute illness.  
| | • History of Guillain-Barré syndrome (GBS) within 6wks of a previous influenza vaccination.  
| | • For LAIV only:  
| | - Close contact with an immunosuppressed person when the person requires protective isolation.  
| | - Receipt of specific antivirals (i.e., amantadine, rimantadine, zanamivir, or oseltamivir) 48hrs before vaccination. Avoid use of these antiviral drugs for 14d after vaccination.  
| **Varicella**  
| (Chickenpox)  
| Give SC | • If younger than age 13yrs, space dose #1 and #2 at least 3m apart.  
| | for children age 2 through 4yrs, wheezing or asthma within the past 12m, per healthcare provider statement.  
| | • If you are younger than age 13yrs, space dose #1 and #2 at least 3m apart.  
| | • For LAIV only:  
| | - Moderate or severe acute illness.  
| | - If blood, plasma, and/or immune globulin (IG or VZIG) were given in past 11m, see ACIP statement General Recommendations on Immunization® regarding time to wait before vaccinating.  
| | - Close contact with an immunosuppressed person when the person requires protective isolation.  
| | • For MMRV only, personal or family (i.e., sibling or parent) history of seizures.  
| | Note: For patients with humoral immunodeficiency or leukemia, see ACIP recommendations®.  
| **MMR**  
| (Measles, mumps, rubella)  
| Give SC | • If MMR and either Var, LAIV, and/or yellow fever vaccine are not given on the same day, space them at least 28d apart.  
| | Note: MMR is not contraindicated if a TST (tuberculosis skin test) was recently applied. If TST and MMR are not given on same day, delay TST for at least 4wks after MMR.  
| | • Previous anaphylaxis to this vaccine, to any of its components.  
| | • Pregnancy or possibility of pregnancy within 4wks.  
| | • Severe immunodeficiency (e.g., hematologic and solid tumors; receiving chemotherapy; congenital immunodeficiency; long-term immunosuppressive therapy, or severely symptomatic HIV).  
| | Note: HIV infection is NOT a contraindication to MMR for children who are not severely immunocompromised (consult ACIP MMR recommendations [MMWR 1998;47 [RR-8] for details®).  
| | Precautions  
| | • Moderate or severe acute illness.  
| | • If blood, plasma, or immune globulin given in past 11m, see ACIP statement General Recommendations on Immunization® regarding time to wait before vaccinating.  
| | • History of thrombocytopenia or thrombocytopenic purpura.  
| | • For MMRV only, personal or family (i.e., sibling or parent) history of seizures.  

Note: Contraindications are contraindications to the specific vaccine being given, regardless of the type of vaccine. Contraindications to many vaccines are based on the recognition that a reaction to the vaccine may occur and that a worse reaction may occur if the vaccine is given to a person with that condition, regardless of the specific vaccine given. Precautions are based on the recognition that a reaction to the vaccine may occur if the vaccine is given, but the risk of severe reaction is considered low. Precautions are not contraindications. Contraindications may override precautions.
<table>
<thead>
<tr>
<th>Vaccine name and route</th>
<th>Schedule for routine vaccination and other guidelines</th>
<th>Schedule for catch-up vaccination and related issues</th>
<th>Contraindications and precautions (mild illness is not a contraindication)</th>
</tr>
</thead>
</table>
| **Hib** *(Haemophilus influenzae type b)*  
*Give IM* | - ActHib (PRP-T): give at age 2m, 4m, 6m, 12–15m (booster dose).  
- PedvaxHIB or Comvax (containing PRP-OMP): give at age 2m, 4m, 12–15m (booster dose).  
- Dose #1 of Hib vaccine should not be given earlier than age 6wks.  
- The last dose (booster dose) is given no earlier than age 12m and a minimum of 8wks after the previous dose.  
- Hib vaccines are interchangeable; however, if different brands of Hib vaccines are administered for dose #1 and dose #2, a total of 3 doses are necessary to complete the primary series in infants.  
- Any Hib vaccine may be used for the booster dose.  
- Hib is not routinely given to children age 5yrs and older.  
- Hib is approved ONLY for the booster dose at age 15m through 4yrs.  
- **High-risk**: Those with sickle cell disease; anatomic or functional asplenia; chronic cardiac, pulmonary, or renal disease; diabetes; cerebrospinal fluid leaks; HIV infection; immunosuppression; diseases associated with immunosuppressive and/or radiation therapy; or who have or will have a cochlear implant. | All Hib vaccines:  
- If #1 was given at 12–14m, give booster in 8wks.  
- Give only 1 dose to unvaccinated children ages 15 through 59m.  
**ActHib**:  
- #2 and #3 may be given 4wks after previous dose.  
- If #1 was given at age 7–11m, only 3 doses are needed; #2 is given 4–8wks after #1, then boost at age 12–15m (wait at least 8wks after dose #2).  
**PedvaxHIB and Comvax**:  
- #2 may be given 4wks after dose #1. | **Contraindications**  
- Previous anaphylaxis to this vaccine or to any of its components.  
- Age younger than 6wks.  
**Precaution**  
Moderate or severe acute illness. |
| **Pneumococcal conjugate (PCV13)**  
*Give IM* | As soon as feasible, replace existing stock of PCV7 with PCV13.  
- Give at ages 2m, 4m, 6m, 12–15m.  
- Dose #1 may be given as early as age 6wks.  
- When children are behind on PCV schedule, minimum interval for doses given to children younger than age 12m is 4wks; for doses given at 12m and older is 8wks.  
- Give 1 dose to unvaccinated healthy children age 24–59m.  
- For high-risk** children ages 24–71m: Give 2 doses at least 8wks apart if they previously received fewer than 3 doses; give 1 dose at least 8wks after the most recent dose if they previously received 3 doses.  
- PCV13 is not routinely given to healthy children age 5yrs and older. | - For minimum intervals, see bullet #3 at left.  
- For age 7–11m: If history of 0 doses, give 2 doses 4wks apart, with a 3rd dose at age 12–15m; if history of 1 or 2 doses, give 1 dose with a 2nd dose at age 12–15m.  
- For age 12–23m: If unvaccinated or history of 1 dose before age 12m, give 2 doses 8wks apart; if history of 1 dose at or after age 12m or 2 or 3 doses before age 12m, give 1 dose at least 8wks after most recent dose.  
- For age 24–59m and healthy: If unvaccinated or any incomplete schedule or if 4 doses of PCV7 or any other age-appropriate complete PCV7 schedule, give 1 dose at least 8wks after the most recent dose.  
- For age 24–71m and at high risk**: If unvaccinated or any incomplete schedule of 1 or 2 doses, give 2 doses, 1 at least 8wks after the most recent dose and another dose at least 8wks later; if any incomplete series of 3 doses, or if 4 doses of PCV7 or any other age-appropriate complete PCV7 schedule, give 1 dose at least 8wks after the most recent dose.  
- For children ages 6 through 18yrs with functional or anatomic asplenia (including sickle cell disease), HIV infection or other immunocompromising condition, cochlear implant, or CSF leak, consider giving 1 dose of PCV13 regardless of previous history of PCV7 or PPSV. | **Contraindication**  
Previous anaphylaxis to a PCV vaccine, to any of its components, or to any diphtheria toxoid-containing vaccine.  
**Precaution**  
Moderate or severe acute illness. |
| **Pneumococcal polysaccharide (PPSV)**  
*Give IM or SC* | - Give 1 dose at least 8wks after final dose of PCV to high-risk children age 2yrs and older.  
- For children who are immunocompromised or have sickle cell disease or functional or anatomic asplenia, give a 2nd dose of PPSV 5yrs after previous PPSV (consult ACIP PPSV recommendations at www.cdc.gov/vaccines/pubs/ACIP-list.htm*).  
**Moderate or severe acute illness.** | - For minimum intervals, see bullet #3 at left.  
- For age 7–11m: If history of 0 doses, give 2 doses 4wks apart, with a 3rd dose at age 12–15m; if history of 1 or 2 doses, give 1 dose with a 2nd dose at age 12–15m.  
- For age 12–23m: If unvaccinated or history of 1 dose before age 12m, give 2 doses 8wks apart; if history of 1 dose at or after age 12m or 2 or 3 doses before age 12m, give 1 dose at least 8wks after most recent dose.  
- For age 24–59m and healthy: If unvaccinated or any incomplete schedule or if 4 doses of PCV7 or any other age-appropriate complete PCV7 schedule, give 1 dose at least 8wks after the most recent dose.  
- For age 24–71m and at high risk**: If unvaccinated or any incomplete schedule of 1 or 2 doses, give 2 doses, 1 at least 8wks after the most recent dose and another dose at least 8wks later; if any incomplete series of 3 doses, or if 4 doses of PCV7 or any other age-appropriate complete PCV7 schedule, give 1 dose at least 8wks after the most recent dose.  
- For children ages 6 through 18yrs with functional or anatomic asplenia (including sickle cell disease), HIV infection or other immunocompromising condition, cochlear implant, or CSF leak, consider giving 1 dose of PCV13 regardless of previous history of PCV7 or PPSV. | **Contraindication**  
Previous anaphylaxis to this vaccine or to any of its components.  
**Precaution**  
Moderate or severe acute illness. |
### Summary of Recommendations for Childhood and Adolescent Immunization

<table>
<thead>
<tr>
<th>Vaccine name and route</th>
<th>Schedule for routine vaccination and other guidelines (any vaccine can be given with another)</th>
<th>Schedule for catch-up vaccination and related issues</th>
<th>Contraindications and precautions (mild illness is not a contraindication)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rotavirus (RV)</strong></td>
<td>• Rotarix (RV1): give at age 2m, 4m. • RotaTeq (RV5): give at age 2m, 4m, 6m. • May give dose #1 as early as age 6wks. • Give final dose no later than age 8m 0 days.</td>
<td>• Do not begin series in infants older than age 15wks 0 days. • Intervals between doses may be as short as 4wks. • If prior vaccination included use of different or unknown brand(s), a total of 3 doses should be given.</td>
<td><strong>Contraindication</strong> Previous anaphylaxis to this vaccine or to any of its components. If allergy to latex, use RV5. <strong>Precautions</strong> • Moderate or severe acute illness. • Altered immunocompetence. • Moderate to severe acute gastroenteritis or chronic pre-existing gastrointestinal disease. • History of intussusception.</td>
</tr>
<tr>
<td><strong>Hepatitis A (HepA)</strong></td>
<td>• Give 2 doses spaced 6m apart to all children at age 1yr (12–23m). • Vaccinate all previously unvaccinated children and adolescents age 2yrs and older who - Want to be protected from HAV infection. - Live in areas where vaccination programs target older children. - Travel anywhere except U.S., W. Europe, N. Zealand, Australia, Canada, or Japan. - Have chronic liver disease, clotting factor disorder, or are adolescent males who have sex with other males. - Are users of illicit drugs (injectable or non-injectable). - Anticipate close personal contact with an international adoptee from a country of high or intermediate endemicity during the first 60 days following the adoptee’s arrival in the U.S.</td>
<td>• Minimum interval between doses is 6m. • Children who are not fully vaccinated by age 2yrs can be vaccinated at subsequent visits. • Consider routine vaccination of children age 2yrs and older in areas with no existing program. • Give 1 dose as postexposure prophylaxis to incompletely vaccinated children age 12m and older who have recently (during the past 2wks) been exposed to hepatitis A virus.</td>
<td><strong>Contraindication</strong> Previous anaphylaxis to this vaccine or to any of its components. <strong>Precautions</strong> • Moderate or severe acute illness. • Pregnancy.</td>
</tr>
<tr>
<td><strong>Meningococcal conjugate (MCV4)</strong></td>
<td>• Give 1-time dose of MCV4 to adolescents age 11 through 18yrs. • Vaccinate all college freshmen living in dorms who have not been vaccinated. • Vaccinate all children age 2yrs and older who have any of the following risk factors: - Anatomic or functional asplenia, or persistent complement component deficiency. - Travel to or reside in countries in which meningococcal disease is hyperendemic or epidemic (e.g., the “meningitis belt” of Sub-Saharan Africa). - Military recruits <strong>Note:</strong> Use MPSV4 ONLY if there is a permanent contraindication or precaution to MCV4.</td>
<td>If previously vaccinated with MPSV4 or MCV4 and risk of meningococcal disease persists, revaccinate with Menactra in 3yrs (if first dose given at age 2 through 6yrs) or revaccinate with either brand of MCV4 after 5yrs (if previous dose given at age 7yrs or older). If the only risk factor is living in a campus dormitory, there is no need to give a 2nd dose if previous dose was MCV4.</td>
<td><strong>Contraindication</strong> Previous anaphylaxis to any meningococcal vaccine or to any of its components, including diphtheria toxoid (for MCV4). <strong>Precautions</strong> • Moderate or severe acute illness. • For MCV4 only: history of Guillain-Barré syndrome (if not at extremely high risk for meningococcal disease). • In pregnancy, studies of vaccination with MPSV4 have not documented adverse effects so may use MPSV4 if indicated. No data are available on the safety of MCV4 during pregnancy.</td>
</tr>
<tr>
<td><strong>Meningococcal polysaccharide (MPSV4)</strong></td>
<td>• Give SC</td>
<td>Minimum intervals between doses: 4wks between #1 and #2; 12 wks between #2 and #3. Overall, there must be at least 24wks between doses #1 and #3. If possible, use the same vaccine product for all doses.</td>
<td><strong>Contraindication</strong> Previous anaphylaxis to this vaccine or to any of its components. <strong>Precautions</strong> • Moderate or severe acute illness. • Pregnancy.</td>
</tr>
<tr>
<td><strong>Human papillomavirus HPV</strong> (HPV2, Cervarix) (HPV4, Gardasil)</td>
<td>• Give IM</td>
<td>• Give 3-dose series to girls at age 11–12yrs on a 0, 1–2, 6m schedule. (May be given as early as age 9yrs.) • Vaccinate all older girls and women (through age 26yrs) who were not previously vaccinated. • Consider giving HPV4 to males age 9 through 26yrs to reduce their likelihood of acquiring genital warts.</td>
<td><strong>Contraindication</strong> Previous anaphylaxis to this vaccine or to any of its components. <strong>Precautions</strong> • Moderate or severe acute illness. • Pregnancy.</td>
</tr>
</tbody>
</table>