



Figure 1. Recommended Immunization Schedule for Persons Ages 0 through 6 Years, U.S., 2009

For those who fall behind or start late, see the catch-up schedule (Table 1).

Vaccine ▼	Age ►	Birth	1 mo	2 mo	4 mo	6 mo	12 mo	15 mo	18 mo	19–23 mo	2–3 yrs	4–6 yrs	
Hepatitis B ¹	HepB	HepB	HepB	See footnote 1	HepB								
Rotavirus ²			RV	RV	RV ²								
Diphtheria, Tetanus, Pertussis ³			DTaP	DTaP	DTaP	See footnote 3	DTaP						
<i>Haemophilus influenzae</i> type b ⁴			Hib	Hib	Hib ⁴	Hib							
Pneumococcal ⁵			PCV	PCV	PCV	PCV					PPSV		
Inactivated Poliovirus			IPV	IPV	IPV							IPV	
Influenza ⁶			Influenza (Yearly)										
Measles, Mumps, Rubella ⁷						MMR		See footnote 7					MMR
Varicella ⁸						Varicella		See footnote 8					Varicella
Hepatitis A ⁹						HepA (2 doses)						HepA Series	
Meningococcal ¹⁰												MCV	

 Range of recommended ages
 Certain high-risk groups

This schedule indicates the recommended ages for routine administration of currently licensed vaccines, as of December 17, 2008, for children ages 0 through 6 years. Any dose not given at the recommended age should be given at a subsequent visit, when indicated and feasible. Licensed combination vaccines may be used whenever any component of the combination is indicated and other components are not contraindicated and if approved by the Food and Drug Administration for that dose of the series. Providers should consult the relevant Advisory Committee on

Immunization Practices statement for detailed recommendations, including high-risk conditions: www.cdc.gov/vaccines/pubs/acip-list.htm. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance about how to obtain and complete a VAERS form is available at www.vaers.hhs.gov or by telephone, (800) 822-7967.

1. Hepatitis B vaccine (HepB). (Minimum age: birth)

At birth:

- Give monovalent HepB to all newborns before hospital discharge.
- If mother is hepatitis B surface antigen (HBsAg)-positive, give newborn HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth.
- If mother's HBsAg status is unknown, give newborn HepB within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if HBsAg-positive, give newborn HBIG (no later than age 1 week).

After the birth dose:

- The HepB series should be completed with either monovalent HepB or a combination vaccine containing HepB. The second dose should be given at age 1 or 2 months. The final dose should be given no earlier than age 24 weeks.
- Infants born to HBsAg-positive mothers should be tested for HBsAg and antibody to HBsAg (anti-HBs) after completion of at least 3 doses of the HepB series, at age 9 through 18 months (generally at the next well-child visit).

4-month dose:

- Administration of 4 doses of HepB to infants is permissible when combination vaccines containing HepB are given after the birth dose.

2. Rotavirus vaccine (RV). (Minimum age: 6 weeks)

- Give the first dose at age 6 through 14 weeks (maximum age: 14 weeks 6 days). Vaccination should not be initiated for infants ages 15 weeks 0 days or older.
- Give the final dose in the series by age 8 months 0 days.
- If Rotarix[®] is given at ages 2 and 4 months, a dose at 6 months is not indicated.

3. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). (Minimum age: 6 weeks)

- The fourth dose may be given as early as age 12 months, provided at least 6 months have elapsed since the third dose.
- Give the final dose in the series at age 4 through 6 years.

4. *Haemophilus influenzae* type b conjugate vaccine (Hib). (Minimum age: 6 weeks)

- If PRP-OMP (PedvaxHIB[®] or ComVax[®][HepB-Hib]) is given at ages 2 and 4 months, a dose at age 6 months is not indicated.
- TriHibit[®] (DTaP/Hib) should not be used for doses at ages 2, 4, or 6 months but can be used as the final dose in children age 12 months or older.

5. Pneumococcal vaccine. (Minimum age: 6 weeks for pneumococcal conjugate vaccine [PCV]; 2 years for pneumococcal polysaccharide vaccine [PPSV])

- PCV is recommended for all children age younger than 5 years. Give 1 dose of PCV to all healthy

children ages 24 through 59 months who are not completely vaccinated for their age.

- Give PPSV to children age 2 years or older with certain underlying medical conditions (see *MMWR* 2000;49[No. RR-9]), including a cochlear implant.
- ## 6. Influenza vaccine. (Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 2 years for live, attenuated influenza vaccine [LAIV])
- Give annually to children ages 6 months through 18 years.
 - For healthy nonpregnant persons (i.e., those who do not have underlying medical conditions that predispose them to influenza complications) ages 2 through 49 years, either LAIV or TIV may be used.
 - Children receiving TIV should receive 0.25 mL if age 6 through 35 months or 0.5 mL if age 3 years or older.
 - Give 2 doses (separated by at least 4 weeks) to children age younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
- ## 7. Measles, mumps, and rubella vaccine (MMR). (Minimum age: 12 months)
- Give the second dose at age 4 through 6 years. However, the second dose may be given before age 4, provided at least 28 days have elapsed since the first dose.
- ## 8. Varicella vaccine. (Minimum age: 12 months)
- Give the second dose at age 4 through 6 years. However, the second dose may be given before age 4, provided at least 3 months have elapsed since the first dose.
 - For children ages 12 months through 12 years, the minimum interval between doses is 3 months. However, if the second dose was given at least 28 days after the first dose, it can be accepted as valid.
- ## 9. Hepatitis A vaccine (HepA). (Minimum age: 12 months)
- Give to all children age 1 year (i.e., ages 12 through 23 months). Give 2 doses at least 6 months apart.
 - Children not fully vaccinated by age 2 years can be vaccinated at subsequent visits.
 - HepA also is recommended for children older than age 1 year who live in areas where vaccination programs target older children or who are at increased risk of infection. See *MMWR* 2006;55(No. RR-7).
- ## 10. Meningococcal vaccine. (Minimum age: 2 years for meningococcal conjugate vaccine [MCV] and for meningococcal polysaccharide vaccine [MPSV])
- Give MCV to children ages 2 through 10 years with terminal complement component deficiency, anatomical or functional asplenia, and certain other high-risk groups. See *MMWR* 2005;54(No. RR-7).
 - Persons who received MPSV 3 or more years previously and who remain at increased risk for meningococcal disease should be revaccinated with MCV.