

Figure 1. Recommended immunization schedule for persons aged 0 through 18 years – 2013.
(FOR THOSE WHO FALL BEHIND OR START LATE, SEE THE CATCH-UP SCHEDULE (FIGURE 2)).

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are in bold.

Vaccines	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos	18 mos	19–23 mos	2–3 yrs	4–6 yrs	7–10 yrs	11–12 yrs	13–15 yrs	16–18 yrs
Hepatitis B ¹ (HepB)	1 st dose	2 nd dose	3 rd dose													
Rotavirus ² (RV) RV-1 (2-dose series); RV-5 (3-dose series)		1 st dose	2 nd dose	See footnote 2												
Diphtheria, tetanus, & acellular pertussis ³ (DTaP: <7 yrs)		1 st dose	2 nd dose	3 rd dose					4 th dose			5 th dose				
Tetanus, diphtheria, & acellular pertussis ³ (Tdap: ≥7 yrs)														(Tdap)		
<i>Haemophilus influenzae</i> type b ⁵ (Hib)		1 st dose	2 nd dose	See footnote 5			3 rd or 4 th dose, see footnote 5									
Pneumococcal conjugate ^{6a,c} (PCV13)		1 st dose	2 nd dose	3 rd dose			4 th dose									
Pneumococcal polysaccharide ^{6b,c} (PPSV23)																
Inactivated Poliovirus ⁷ (IPV) (<18 years)		1 st dose	2 nd dose				3 rd dose					4 th dose				
Influenza ⁸ (IIV; LAIV) 2 doses for some - see footnote 8																
Measles, mumps, rubella ⁹ (MMR)							1 st dose					2 nd dose				
Varicella ¹⁰ (VAR)							1 st dose					2 nd dose				
Hepatitis A ¹¹ (HepA)																
Human papillomavirus ¹² (HPV2: females only; HPV4: males and females)																
Meningococcal ¹³ (Hib-MenCY ≥ 6 weeks; MCV4-D ≥ 9 mos; MCV4-CRM ≥ 2 yrs.)																

Range of recommended ages for all children
Range of recommended ages for catch-up immunization
Range of recommended ages for certain high-risk groups
Range of recommended ages during which catch-up is encouraged and for certain high-risk groups
Not routinely recommended

This schedule includes recommendations in effect as of January 1, 2013. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Vaccination providers should consult the relevant Advisory Committee on Immunization Practices (ACIP) statement for detailed recommendations, available online at <http://www.cdc.gov/vaccines/pubs/acip-list.htm>. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS) online (<http://www.vaers.hhs.gov>) or by telephone (800-822-7967). Suspected cases of vaccine-preventable diseases should be reported to the state or local health department. Additional information, including precautions and contraindications for vaccination, is available from CDC online (<http://www.cdc.gov/vaccines>) or by telephone (800-CDC-INFO [800-232-4636]).

This schedule is approved by the Advisory Committee on Immunization Practices (<http://www.cdc.gov/vaccines/acip/index.html>), the American Academy of Pediatrics (<http://www.aap.org>), the American Academy of Family Physicians (<http://www.aafp.org>), and the American College of Obstetricians and Gynecologists (<http://www.acog.org>).

NOTE: The above recommendations must be read along with the footnotes of this schedule.

Footnotes — Recommended immunization schedule for persons aged 0 through 18 years—United States, 2013

For further guidance on the use of the vaccines mentioned below, see: <http://www.cdc.gov/vaccines/pubs/acip-list.htm>.

- Hepatitis B (HepB) vaccine. (Minimum age: birth)**
Routine vaccination:
At birth

 - Administer monovalent HepB vaccine to all newborns before hospital discharge.
 - For infants born to hepatitis B surface antigen (HBsAg)-positive mothers, administer HepB vaccine and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth. These infants should be tested for HBsAg and antibody to HBsAg (anti-HBs) 1 to 2 months after completion of the HepB series, at age 9 through 18 months (preferably at the next well-child visit).
 - If mother's HBsAg status is unknown, within 12 hours of birth administer HepB vaccine to all infants regardless of birth weight. For infants weighing <2,000 grams, administer HBIG in addition to HepB within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if she is HBsAg-positive, also administer HBIG for infants weighing ≥2,000 grams (no later than age 1 week).

Doses following the birth dose

 - The second dose should be administered at age 1 or 2 months. Monovalent HepB vaccine should be used for doses administered before age 6 weeks.
 - Infants who did not receive a birth dose should receive 3 doses of a HepB-containing vaccine on a schedule of 0, 1 to 2 months, and 6 months starting as soon as feasible. See Figure 2.
 - The minimum interval between dose 1 and dose 2 is 4 weeks and between dose 2 and 3 is 8 weeks. The final (third or fourth) dose in the HepB vaccine series should be administered no earlier than age 24 weeks, and at least 16 weeks after the first dose.
 - Administration of a total of 4 doses of HepB vaccine is recommended when a combination vaccine containing HepB is administered after the birth dose.

Catch-up vaccination:

 - Unvaccinated persons should complete a 3-dose series.
 - A 2-dose series (doses separated by at least 4 months) of adult formulation Recombivax HB is licensed for use in children aged 11 through 15 years.
 - For other catch-up issues, see Figure 2.
- Rotavirus (RV) vaccines. (Minimum age: 6 weeks for both RV-1 [Rotarix] and RV-5 [RotaTeq]).**
Routine vaccination:

 - Administer a series of RV vaccine to all infants as follows:
 - If RV-1 is used, administer a 2-dose series at 2 and 4 months of age.
 - If RV-5 is used, administer a 3-dose series at ages 2, 4, and 6 months.
 - If any dose in series was RV-5 or vaccine product is unknown for any dose in the series, a total of 3 doses of RV vaccine should be administered.

Catch-up vaccination:

 - The maximum age for the first dose in the series is 14 weeks, 6 days.
 - Vaccination should not be initiated for infants aged 15 weeks 0 days or older.
 - The maximum age for the final dose in the series is 8 months, 0 days.
 - If RV-1 (Rotarix) is administered for the first and second doses, a third dose is not indicated.
 - For other catch-up issues, see Figure 2.
- Diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine. (Minimum age: 6 weeks)**
Routine vaccination:

 - Administer a 5-dose series of DTaP vaccine at ages 2, 4, 6, 15–18 months, and 4 through 6 years. The fourth dose may be administered as early as age 12 months, provided at least 6 months have elapsed since the third dose.

Catch-up vaccination:

 - The fifth (booster) dose of DTaP vaccine is not necessary if the fourth dose was administered at age 4 years or older.
 - For other catch-up issues, see Figure 2.
- Tetanus and diphtheria toxoids and acellular pertussis (Tdap) vaccine. (Minimum age: 10 years for Boostrix, 11 years for Adacel).**
Routine vaccination:

 - Administer 1 dose of Tdap vaccine to all adolescents aged 11 through 12 years.
 - Tdap can be administered regardless of the interval since the last tetanus and diphtheria toxoid-containing vaccine.
 - Administer one dose of Tdap vaccine to pregnant adolescents during each pregnancy (preferred during 27 through 36 weeks gestation) regardless of number of years from prior Td or Tdap vaccination.

Catch-up vaccination:

 - Persons aged 7 through 10 years who are not fully immunized with the childhood DTaP vaccine series, should receive Tdap vaccine as the first dose in the catch-up series; if additional doses are needed, use Td vaccine. For these children, an adolescent Tdap vaccine should not be given.
 - Persons aged 11 through 18 years who have not received Tdap vaccine should receive a dose followed by tetanus and diphtheria toxoids (Td) booster doses every 10 years thereafter.
 - An inadvertent dose of DTaP vaccine administered to children aged 7 through 10 years can count as part of the catch-up series. This dose can count as the adolescent Tdap dose, or the child can later receive a Tdap booster dose at age 11–12 years.
 - For other catch-up issues, see Figure 2.
- Haemophilus influenzae* type b (Hib) conjugate vaccine. (Minimum age: 6 weeks)**
Routine vaccination:

 - Administer a Hib vaccine primary series and a booster dose to all infants. The primary series doses should be administered at 2, 4, and 6 months of age; however, if PRP-OMP (Pedvax-Hib or Comvax) is administered at 2 and 4 months of age, a dose at age 6 months is not indicated. One booster dose should be administered at age 12 through 15 months.
 - Hiberix (PRP-T) should only be used for the booster (final) dose in children aged 12 months through 4 years, who have received at least 1 dose of Hib.

Catch-up vaccination:

 - If dose 1 was administered at ages 12–14 months, administer booster (as final dose) at least 8 weeks after dose 1.
 - If the first 2 doses were PRP-OMP (Pedvax-Hib or Comvax), and were administered at age 11 months or younger, the third (and final) dose should be administered at age 12 through 15 months and at least 8 weeks after the second dose.
 - If the first dose was administered at age 7 through 11 months, administer the second dose at least 4 weeks later and a final dose at age 12 through 15 months, regardless of Hib vaccine (PRP-T or PRP-OMP) used for first dose.
 - For unvaccinated children aged 15 months or older, administer only 1 dose.