

Figure 1. Recommended Immunization Schedule for Children and Adolescents Ages 18 Years or Younger, United States, 2017

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 shaded in gray.

Vaccine	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 yrs	17–18 yrs
Hepatitis B ¹ (HepB)	1st dose	← 2nd dose →			← 3rd dose →												
Rotavirus ² (RV) RV1 (2-dose series); RV5 (3-dose series)			1st dose	2nd dose	See footnote 2												
Diphtheria, tetanus & acellular pertussis ³ (DTaP: <7 yrs)			1st dose	2nd dose	3rd dose			← 4th dose →				5th dose					
<i>Haemophilus influenzae</i> type b ⁴ (Hib)			1st dose	2nd dose	See footnote 4		← 3rd or 4th dose → (see footnote 4)										
Pneumococcal conjugate ⁵ (PCV13)			1st dose	2nd dose	3rd dose		← 4th dose →										
Inactivated Poliovirus ⁶ (IPV: <18 yrs)			1st dose	2nd dose	← 3rd dose →						4th dose						
Influenza ⁷ (IIV)					Annual vaccination (IIV) 1 or 2 doses								Annual vaccination (IIV) 1 dose only				
Measles, mumps, rubella ⁸ (MMR)					See footnote 8	← 1st dose →						2nd dose					
Varicella ⁹ (VAR)							← 1st dose →					2nd dose					
Hepatitis A ¹⁰ (HepA)							← 2-dose series, see footnote 10 →										
Meningococcal ¹¹ (Hib-MenCY: ≥6 wks; MenACWY-CRM: ≥2 mos; MenACWY-D: ≥9 mos)			See footnote 11										1st dose		2nd dose		
Tetanus, diphtheria & acellular pertussis ¹² (Tdap: ≥7 yrs)																	Tdap
Human Papillomavirus ¹³ (HPV)																	See footnote 13
Meningococcal B ¹¹														See footnote 11			
Pneumococcal polysaccharide ⁵ (PPSV23)												See footnote 5					

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 for non-high-risk groups that may receive vaccine, subject to individual clinical decision making
 No recommendation

This schedule includes recommendations in effect as of January 1, 2017. 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 www.cdc.gov/vaccines/hcp/acip-recs/index.html. Clinically significant adverse

events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS) online (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 (www.cdc.gov/vaccines/hcp/admin/contraindications.html) or by telephone (800-CDC-INFO [800-232-4636]).

Additional Information

- For information on contraindications and precautions for the use of a vaccine and for additional information regarding that vaccine, vaccination providers should consult the ACIP General Recommendations on Immunization and the relevant ACIP statement, available online at www.cdc.gov/vaccines/hcp/acip-recs/index.html.
- For the purposes of calculating intervals between doses, 4 weeks = 28 days. Intervals of 4 months or greater are determined by calendar months.
- Vaccine doses administered 4 days or less before the minimum interval are considered valid. Doses of any vaccine administered ≥5 days earlier than the minimum interval or minimum age should not be counted as valid doses and should be repeated as age-appropriate. The repeat dose should be spaced after the invalid dose by the recommended minimum interval. For further details, see Table 1, Recommended and minimum ages and intervals between vaccine doses in *MMWR*, General Recommendations on Immunization and Reports/Vol.60/No.2; available online at www.cdc.gov/mmwr/pdf/rr/rr6002.pdf.

- Information on travel vaccine requirements and recommendations is available at wwwnc.cdc.gov/travel.
- For vaccination of persons with primary and secondary immunodeficiencies, see Table 13, "Vaccination of persons with primary and secondary immunodeficiencies," in General Recommendations on Immunization (ACIP), available at www.cdc.gov/mmwr/pdf/rr/rr6002.pdf; and Immunization in Special Clinical Circumstances, (American Academy of Pediatrics) in Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. *Red Book: 2015 Report of the Committee on Infectious Disease*. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2015:68–107.
- The National Vaccine Injury Compensation Program (VICP) is a no-fault alternative to the traditional legal system for resolving vaccine injury petitions. Created by the National Childhood Vaccine Injury Act of 1986, it provides compensation to people found to be injured by certain vaccines. All vaccines within the recommended childhood immunization schedule are covered by VICP except for pneumococcal polysaccharide vaccine (PPSV23). For more information, see www.hrsa.gov/vaccinecompensation/index.html.