

Figure 2. Recommended Immunization Schedule for Persons Ages 7 through 18 Years, U.S., 2010

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

Vaccine ▼	Age ►	7–10 yrs	11–12 yrs	13–18 yrs
Tetanus, Diphtheria, Pertussis ¹			Tdap	Tdap
Human Papillomavirus ²	See footnote 2		HPV (3 doses)	HPV Series
Meningococcal ³		MCV	MCV	MCV
Influenza ⁴		Influenza (Yearly)		
Pneumococcal ⁵		PPSV		
Hepatitis A ⁶		HepA Series		
Hepatitis B ⁷		HepB Series		
Inactivated Poliovirus ⁸		IPV Series		
Measles, Mumps, Rubella ⁹		MMR Series		
Varicella ¹⁰		Varicella Series		

Range of recommended ages for all children except certain high-risk groups

Range of recommended ages for catch-up immunization

Range of recommended ages for certain high-risk groups

This schedule includes recommendations in effect as of December 15, 2009. Any dose not given at the recommended age should be given 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. Considerations should include provider assessment, patient preference, and

the potential for adverse events. Providers should consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations: 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) at www.vaers.hhs.gov or by telephone, 800-822-7967.

1. Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap). (Minimum age: 10 years for Boostrix and 11 years for Adacel)

- Give at age 11 or 12 years for those who have completed the recommended childhood DTP/DTaP vaccination series and have not received a tetanus and diphtheria toxoid (Td) booster dose.
- Persons ages 13 through 18 years who have not received Tdap should receive a dose.
- A 5-year interval from the last Td dose is encouraged when Tdap is used as a booster dose; however, a shorter interval may be used if pertussis immunity is needed.

2. Human papillomavirus vaccine (HPV). (Minimum age: 9 years)

- Two HPV vaccines are licensed: a quadrivalent vaccine (HPV4) for the prevention of cervical, vaginal and vulvar cancers (in females) and genital warts (in females and males), and a bivalent vaccine (HPV2) for the prevention of cervical cancers in females.
- HPV vaccines are most effective for both males and females when given before exposure to HPV through sexual contact.
- HPV4 or HPV2 is recommended for the prevention of cervical precancers and cancers in females.
- HPV4 is recommended for the prevention of cervical, vaginal and vulvar precancers and cancers and genital warts in females.
- Give the first dose to females at age 11 or 12 years.
- Give the second dose 1 to 2 months after the first dose and the third dose 6 months after the first dose (at least 24 weeks after the first dose).
- Give the series to females at age 13 through 18 years if not previously vaccinated.
- HPV4 may be given in a 3-dose series to males ages 9 through 18 years to reduce their likelihood of acquiring genital warts.

3. Meningococcal conjugate vaccine (MCV4).

- Give at age 11 or 12 years, or at age 13 through 18 years if not previously vaccinated.
- Give to previously unvaccinated college freshmen living in a dormitory.
- Give MCV4 to children ages 2 through 10 years with persistent complement component deficiency, anatomic or functional asplenia, or certain other conditions placing them at high risk.
- Give to children previously vaccinated with MCV4 or MPSV4 who remain at increased risk after 3 years (if first dose given at age 2 through 6 years) or after 5 years (if first dose given at age 7 years or older). Persons whose only risk factor is living in on-campus housing are not recommended to receive an additional dose. See *MMWR* 2009;58(37):1042–3.

4. Influenza vaccine (seasonal).

- Give annually to children ages 6 months through 18 years.
- For healthy nonpregnant persons ages 7 through 18 years (i.e., those who do not have

underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used.

- 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.
- For recommendations for use of influenza A (H1N1) 2009 monovalent vaccine, see *MMWR* 2009;58(No. RR-10).

5. Pneumococcal polysaccharide vaccine (PPSV).

- Give to children with certain underlying medical conditions, including a cochlear implant. A single revaccination should be given after 5 years to children with functional or anatomic asplenia or an immunocompromising condition. See *MMWR* 1997;46(No. RR-8).

6. Hepatitis A vaccine (HepA).

- Give 2 doses at least 6 months apart.
- HepA is recommended for children older than age 23 months who live in areas where vaccination programs target older children, who are at increased risk for infection, or for whom immunity against hepatitis A is desired.

7. Hepatitis B vaccine (HepB).

- Give the 3-dose series to those not previously vaccinated.
- A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for children ages 11 through 15 years.

8. Inactivated poliovirus vaccine (IPV).

- The final dose in the series should be given on or after the fourth birthday and at least 6 months following the previous dose.
- If both OPV and IPV were given as part of a series, a total of 4 doses should be given, regardless of the child's current age.

9. Measles, mumps, and rubella vaccine (MMR).

- If not previously vaccinated, give 2 doses or the second dose for those who have received only 1 dose, with at least 28 days between the doses.

10. Varicella vaccine.

- For persons ages 7 through 18 years without evidence of immunity (see *MMWR* 2007;56 [No. RR-4]), give 2 doses if not previously vaccinated or the second dose if only 1 dose has been given.
- For persons ages 7 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.
- For persons age 13 years and older, the minimum interval between doses is 28 days.