Recommendations for Preventive Pediatric Health Care

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INFANCY

<table>
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<tr>
<th>Age</th>
<th>Early</th>
<th>Middle</th>
<th>Adolescence</th>
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<tr>
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<td>11 yrs</td>
<td>12 yrs</td>
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HISTORY: Initial/Interval

- MEASUREMENTS
  - Length/height and weight
  - Head circumference
  - Weight for length
  - Body mass index

- Blood pressure

SENSORY SCREENING

- Vision
- Hearing

DEVELOPMENTAL/BEHAVIORAL ASSESSMENT

- Developmental screening
- Alcohol use assessment
- Nutritional screening

PHYSICAL EXAMINATION

- PROCEDURES
  - Newborn metabolic/hamoglobin screening
  - Vaccines
  - Hemoglobin hemoglobin
  - Lab screening
  - Tuberculosis testing
  - Dystocia screening
  - SHT screening

- ORAL HEALTH

- ANTICIPATORY GUIDANCE

Additional visits may become necessary if circumstances suggest variations from normal.

Each child and family is unique; therefore, these Recommendations for Preventive Pediatric Health Care are designed for the care of children who are receiving competent parenting, have no manifestations of any important health problems, and are growing and developing in satisfactory fashion. Additional visits may become necessary if circumstances suggest variations from normal.

Developmental, psychosocial, and chronic disease issues for children and adolescents may require frequent counseling and treatment visits separate from preventive care visits.

The recommendations represent a consensus of the American Academy of Pediatrics (AAP) and Bright Futures. The AAP continues to emphasize the importance of continuity of care in comprehensive health supervision and the need to avoid fragmenting care.

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**Developed in consultation with: AAP Section on Developmental Behavioral Pediatrics, AAP Bright Futures Steering Committee, AAP Medical Home Initiative for Children With Special Needs Project Advisory Committee,Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and monitoring, and developmental monitoring and screening**

**Based on information available at the time and may not be updated with the most current information available at subsequent times.**

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### Recommended Immunization Schedule for Persons Aged 0–6 Years—UNITED STATES • 2008

For those who fall behind or start late, see the catch-up schedule

<table>
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<th>Vaccine ▼</th>
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<th>15 months</th>
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<th>19–23 months</th>
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<th>4–6 years</th>
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This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2007, for children aged 0 through 6 years. Additional information is available at [www.cdc.gov/vaccines/recs/schedules](http://www.cdc.gov/vaccines/recs/schedules). Any dose not administered at the recommended age should be administered at any subsequent visit, when indicated and feasible. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and other components of the vaccine are not contraindicated and if approved by the Food and Drug Administration for that dose of the series. Providers should consult the respective Advisory Committee on Immunization Practices statement for detailed recommendations, including for high risk conditions: [http://www.cdc.gov/vaccines/pubs/ACIP-list.htm](http://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 VAERS form is available at [www.vaers.hhs.gov](http://www.vaers.hhs.gov) or by telephone, 800-822-7962.

### Vaccines

1. **Hepatitis B vaccine (HepB).** *(Minimum age: birth)*
   - **At birth:**
     - Administer monovalent HepB to all newborns prior to hospital discharge.
     - If mother is hepatitis surface antigen (HBSAg)-positive, administer HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth.
     - If mother’s HBSAg status is unknown, administer HepB within 12 hours of birth. Determine the HBSAg status as soon as possible and if HBSAg-positive, administer HBIG (no later than age 1 week).
     - If mother is HBSAg-negative, the birth dose can be delayed, in rare cases, with a provider’s order and a copy of the mother’s negative HBSAg laboratory report in the infant’s medical record.
   - **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 administered at age 1–2 months. The final dose should be administered no earlier than age 24 weeks. Infants born to HBSAg-positive mothers should be tested for HBSAg and antibody to HBSAg after completion of at least 3 doses of a licensed HepB series, at age 9–18 months (generally at the next well-child visit).
     - It is permissible to administer 4 doses of HepB when combination vaccines are administered after the birth dose. If monovalent HepB is used for doses after the birth dose, a dose at age 4 months is not needed.
   - **4-month dose:**
     - It is permissible to administer 4 doses of HepB when combination vaccines are administered after the birth dose. If monovalent HepB is used for doses after the birth dose, a dose at age 4 months is not needed.

2. **Rotavirus vaccine (Rotavirus).** *(Minimum age: 6 weeks)*
   - Administer the first dose at age 6–12 weeks.
   - Do not start the series later than age 12 weeks.
   - Administer the final dose in the series by age 32 weeks. Do not administer any dose later than age 32 weeks.
   - Data on safety and efficacy outside of these age ranges are insufficient.

3. **Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).** *(Minimum age: 6 weeks)*
   - The fourth dose of DTaP may be administered as early as age 12 months, provided 6 months have elapsed since the third dose.
   - Administer the final dose in the series at age 4–6 years.

4. **Haemophilus influenzae type b conjugate vaccine (Hib).** *(Minimum age: 6 weeks)*
   - If PRP-OMP (PedvaxHIB® or Comvax® [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required.
   - TriHIBit® (DTaP/Hib) combination products should not be used for primary immunization but can be used as boosters following any Hib vaccine in children aged 12 months or older.

5. **Pneumococcal vaccine.** *(Minimum age: 6 weeks for pneumococcal conjugate vaccine [PCV]; 2 years for pneumococcal polysaccharide vaccine [PPV])*
   - At ages 24–59 months administer one dose of PCV to incompletely vaccinated healthy children and two doses of PCV at least 8 weeks apart to incompletely vaccinated children with underlying medical conditions.

6. **Influenza vaccine.** *(Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 2 years for live, attenuated influenza vaccine [LAIV])*
   - Administer annually to children aged 6–59 months and to close contacts of children aged 0–59 months.
   - Administer annually to children 5 years of age and older with certain risk factors, to other persons (including household members) in close contact with persons in groups at higher risk, and to any child whose parents request vaccination.
   - For healthy persons (those who do not have underlying medical conditions that predispose them to influenza complications) ages 2–49 years, either LAIV or TIV may be used.
   - Children receiving TIV should receive 0.25 mL if age 6–35 mos or 0.5 mL if age 3 years or older.
   - Administer 2 doses (separated by 4 weeks or longer) to children younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time last season, but only received one dose.

7. **Measles, mumps, and rubella vaccine (MMR).** *(Minimum age: 12 months)*
   - Administer the second dose of MMR as age 4–6 years. MMR may be administered before age 4–6 years, provided more than 4 weeks have elapsed since the first dose and both doses are administered at age 12 months or older.

8. **Varicella vaccine.** *(Minimum age: 12 months)*
   - Administer the second dose of varicella vaccine at age 4–6 years. Varicella vaccine may be administered before age 4–6 years, provided that 3 months or older have elapsed since the first dose and both doses are administered at age 12 months or older. If second dose was administered 28 days or more following the first dose, the second dose does not need to be repeated.

9. **Hepatitis A vaccine (HepA).** *(Minimum age: 12 months)*
   - HepA is recommended for all children aged 1 yr (i.e., aged 12–23 months). The 2 doses in the series should be administered at least 6 months apart.
   - Children not fully vaccinated by age 2 years can be vaccinated at subsequent visits.
   - HepA is recommended for certain other groups of children, including in areas where vaccination programs target older children.

10. **Meningococcal vaccine.** *(Minimum age: 2 years for meningococcal conjugate vaccine (MCV4) and for meningococcal polysaccharide vaccine (MPSV4))*
    - MCV4 is recommended for children aged 2–10 years with terminal complement deficiencies or anatomic or functional asplenia and certain other high-risk groups. Use of MPSV4 is also acceptable.
    - For persons at high risk previously vaccinated with MPSV4, revaccination may be indicated.

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The Recommended Immunization Schedules for Persons Aged 0–18 Years are approved by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/recs/acip). The American Academy of Pediatrics (www.aap.org), and the American Academy of Family Physicians (www.aafp.org).
1. **Hepatitis B vaccine (HepB).**
   - Administer the 3-dose series to those who were not previously vaccinated.
   - A 2-dose series of Recombivax HB® is licensed for children aged 11–15 years.

2. **Rotavirus vaccine (Rota).**
   - Do not start the series later than age 12 weeks.
   - Administer the final dose in the series by age 32 weeks.
   - Do not administer a dose later than age 32 weeks.
   - Data on safety and efficacy outside of these age ranges are insufficient.

3. **Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).**
   - The fifth dose is not necessary if the fourth dose was administered at age 4 years or older.
   - DTaP is not indicated for persons aged 7 years or older.

4. **Haemophilus influenzae type b conjugate vaccine (Hib).**
   - Vaccine is not generally recommended for children aged 5 years or older.
   - If current age is younger than 12 months and the first 2 doses were PRP-OMP (PedvaxHIB® or ComVax® [Merck]), the third (and final) dose should be administered at age 12–15 months and at least 8 weeks after the second dose.
   - If first dose was administered at age 7–11 months, administer 2 doses separated by 4 weeks plus a booster at age 12–15 months.

5. **Pneumococcal conjugate vaccine (PCV).**
   - Administer one dose of PCV to all healthy children aged 24–59 months having any incomplete schedule.
   - For children with underlying medical conditions administer 2 doses of PCV at least 8 weeks apart if previously received less than 3 doses or 1 dose of PCV if previously received 3 doses.

6. **Inactivated poliovirus vaccine (IPV).**
   - If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child’s current age.
   - IPV is not routinely recommended for persons aged 18 years and older.

7. **Measles, mumps, and rubella vaccine (MMR).**
   - The second dose of MMR is recommended routinely at age 4–6 years but may be administered earlier if desired.
   - If not previously vaccinated, administer 2 doses of MMR during any visit with 4 or more weeks between the doses.

8. **Varicella vaccine.**
   - The second dose of varicella vaccine is recommended routinely at age 4–6 years but may be administered earlier if desired.
   - Do not repeat the second dose in persons younger than 13 years of age if administered 28 or more days after the first dose.

9. **Hepatitis A vaccine (HepA).**
   - HepA is recommended for certain groups of children, including in areas where vaccination programs target older children. See MMWR 2006;55(No. RR-7):1–23.

10. **Tetanus and diphtheria toxoids vaccine (Td) and tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap).**
    - Tdap should be substituted for a single dose of Td in the primary catch-up series or as a booster if age appropriate; use Td for other doses.
    - A 5-year interval from the last Td dose is encouraged when Tdap is used as a booster dose. A booster (fourth) dose is needed if any of the previous doses were administered at younger than 12 months of age. Refer to ACIP recommendations for further information. See MMWR 2006;55(No. RR-3).

11. **Human papillomavirus vaccine (HPV).**
    - Administer the HPV vaccine series to females at age 13–18 years if not previously vaccinated.
This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2007, for children aged 7–18 years. Additional information is available at www.cdc.gov/vaccines/recs/schedules. Any dose not administered at the recommended age should be administered at any subsequent visit, when indicated and feasible. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and other components of the vaccine are not contraindicated and if approved by the Food and Drug Administration for that dose of the series. Providers should consult the respective Advisory Committee on Immunization Practices statement for detailed recommendations, including for high risk conditions: http://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 VAERS form is available at www.vaers.hhs.gov or by telephone, 800-822-7967.

### Recommended Childhood Vaccines for 7–18 Year Olds

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<th>11-12 years</th>
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<tr>
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<tr>
<td>Varicella</td>
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### Additional Notes

1. **Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap).** *(Minimum age: 10 years for BOOSTRIXs and 11 years for ADACEL™)*
   - Administer at age 11–12 years for those who have completed the recommended childhood DTP/DTaP vaccination series and have not received a tetanus and diphtheria toxoids (Td) booster dose.
   - 13–18 year olds who missed the 11–12 year Tdap or received Td only, are encouraged to receive one dose of Tdap 5 years after the last Td/DTaP dose.

2. **Human papillomavirus vaccine (HPV).** *(Minimum age: 9 years)*
   - Administer the first dose of the HPV vaccine series to females at age 11–12 years.
   - Administer the second dose 2 months after the first dose and the third dose 6 months after the first dose.
   - Administer the HPV vaccine series to females at age 13–18 years if not previously vaccinated.

3. **Meningococcal vaccine.**
   - Administer MCV4 at age 11–12 years and at age 13–18 years if not previously vaccinated. MPSV4 is an acceptable alternative.
   - Administer MCV4 to previously unvaccinated college freshmen living in dormitories.
   - MCV4 is recommended for children aged 2-10 years with terminal complement deficiencies or anatomic or functional asplenia and certain other high-risk groups.
   - Persons who received MPSV4 3 or more years prior and remain at increased risk for meningococcal disease should be vaccinated with MCV4.

4. **Pneumococcal polysaccharide vaccine (PPV).**
   - Administer PPV to certain high-risk groups.

5. **Influenza vaccine.**
   - Administer annually to all close contacts of children aged 0–59 months.
   - Administer annually to persons with certain risk factors, health-care workers, and other persons (including household members) in close contact with persons in groups at higher risk.

   - Administer 2 doses (separated by 4 weeks or longer) to children younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time last season, but only received one dose.
   - For healthy nonpregnant persons (those who do not have underlying medical conditions that predispose them to influenza complications) ages 2–49 years, either LAIV or TIV may be used.

6. **Hepatitis A vaccine (HepA).**
   - The 2 doses in the series should be administered at least 6 months apart.
   - HepA is recommended for certain other groups of children, including in areas where vaccination programs target older children.

7. **Hepatitis B vaccine (HepB).**
   - Administer the 3-dose series to those who were not previously vaccinated.
   - A 2-dose series of Recombivax HB is licensed for children aged 11–15 years.

8. **Inactivated poliovirus vaccine (IPV).**
   - For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if the third dose was administered at age 4 years or older.
   - If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child’s current age.

9. **Measles, mumps, and rubella vaccine (MMR).**
   - If not previously vaccinated, administer 2 doses of MMR during any visit, with 4 or more weeks between the doses.
   - Administer 2 doses of varicella vaccine to persons younger than 13 years of age at least 3 months apart. Do not repeat the second dose, if administered 28 or more days following the first dose.
   - Administer 2 doses of varicella vaccine to persons aged 13 years or older at least 4 weeks apart.