### Catch-up Immunization Schedules

**for Persons Aged 4 Months–18 Years Who Start Late or Who Are More Than 1 Month Behind**

The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child’s age.

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Minimum Age for Dose 1</th>
<th>Minimum Interval Between Doses</th>
<th>CATCH-UP SCHEDULE FOR PERSONS AGED 4 MONTHS–6 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B</td>
<td>Birth</td>
<td>4 weeks</td>
<td>Dose 1 to Dose 2</td>
</tr>
<tr>
<td>Rotavirus</td>
<td>6 wks</td>
<td>4 weeks</td>
<td>Dose 2 to Dose 3</td>
</tr>
<tr>
<td>Diphtheria, Tetanus, Pertussis</td>
<td>6 wks</td>
<td>4 weeks</td>
<td>Dose 3 to Dose 4</td>
</tr>
<tr>
<td>Haemophilus influenza type b</td>
<td>6 wks</td>
<td>8 weeks (as final dose)</td>
<td>Dose 4 to Dose 5</td>
</tr>
<tr>
<td>Pneumococcal</td>
<td>6 wks</td>
<td>8 weeks (as final dose)</td>
<td></td>
</tr>
<tr>
<td>Inactivated Poliovirus</td>
<td>6 wks</td>
<td>8 weeks (as final dose)</td>
<td></td>
</tr>
<tr>
<td>Measles, Mumps, Rubella</td>
<td>12 mos</td>
<td>3 mos</td>
<td></td>
</tr>
<tr>
<td>Varicella</td>
<td>12 mos</td>
<td>6 mos</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Minimum Age for Dose 1</th>
<th>Minimum Interval Between Doses</th>
<th>CATCH-UP SCHEDULE FOR PERSONS AGED 7–18 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis A</td>
<td>Birth</td>
<td>4 weeks</td>
<td>Dose 1 to Dose 2</td>
</tr>
<tr>
<td>Inactivated Poliovirus</td>
<td>6 wks</td>
<td>8 weeks (as final dose)</td>
<td>Dose 2 to Dose 3</td>
</tr>
<tr>
<td>Measles, Mumps, Rubella</td>
<td>12 mos</td>
<td>4 weeks</td>
<td>Dose 3 to Dose 4</td>
</tr>
<tr>
<td>Varicella</td>
<td>12 mos</td>
<td>3 months</td>
<td>Dose 4 to Dose 5</td>
</tr>
</tbody>
</table>

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 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).**
   - For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if 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.
   - 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).**
    - 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.

**Information about reporting reactions after immunization is available online at [http://www.vaers.hhs.gov](http://www.vaers.hhs.gov) or by telephone via the 24-hour national toll-free information line 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 immunization, is available from the National Center for Immunization and Respiratory Diseases at [http://www.cdc.gov/vaccines](http://www.cdc.gov/vaccines) or telephone, 800-CDC-INFo (800-232-4636).**