

Catch-up Immunization Schedule for Persons Aged 4 Months Through 18 Years Who Start Late or Who Are More Than 1 Month Behind - United States • 2014

(For DTaP, IPV, Hep B, Hib, Measles, Mumps, Rubella, Pneumococcal, Varicella, TD and Tdap)

Tables 1 and 2 provide 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 1. Catch-up Schedule for Persons Aged 4 Months Through 6 Years
Minimum Interval Between Doses

Vaccine	Minimum Age for Dose 1	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Hepatitis B ¹	Birth	4 weeks	8 weeks and at least 16 weeks after first dose; minimum age for the final dose is 24 weeks		
Diphtheria, Tetanus, Pertussis ²	6 wks	4 weeks	4 weeks	6 months	6 months ²
Haemophilus Influenzae type b ³	6 wks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose) if first dose administered at age 12-14 months No further doses needed if first dose administered at 15 months of age or older	4 weeks if current age is younger than 12 months and first dose administered at < 7 months old 8 weeks and age 12 months through 59 months (as final dose) if current age is younger than 12 months and first dose administered between 7 through 11 months (regardless of Hib vaccine [PRP-T or PRP-OMP] used for first dose); OR if current age is 12 through 59 months and first dose administered at younger than age 12 months; OR first 2 doses were PRP-OMP and administered at younger than 12 months of age No further doses needed if previous dose administered at age 15 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 months through 59 months who received 3 (PRP-T) doses before age 12 months and started the primary series before 7 months	
Pneumococcal ⁴	6 wks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose for healthy children) if first dose administered at age 12 months or older No further doses needed for healthy children if first dose administered at age 24 months or older	4 weeks if current age is younger than 12 months 8 weeks (as final dose for healthy children) if current age is 12 months or older No further doses needed for healthy children if previous dose administered at age 24 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 months through 59 months who received 3 doses before age 12 months or for high risk children who receive 3 doses at any age	
Inactivated Poliovirus ⁵	6 wks	4 weeks	4 weeks	6 months ⁵ minimum age 4 years for final dose	
Measles, Mumps, Rubella ⁶	12 mos	4 weeks			
Varicella ⁷	12 mos	3 months			

¹ Hepatitis (Hep B) vaccine

- Unvaccinated persons should complete a 3-dose series.

² Diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine

- The fifth (booster) dose of DTaP vaccine is not necessary if the fourth dose was administered at age 4 years or older.

³ Haemophilus influenzae type b conjugate (Hib) vaccine

- If dose 1 was administered at ages 12-14 months, administer booster (final dose) at least 8 weeks after dose 1, regardless of Hib vaccine used in the primary series.
- If the first 2 doses were PRP-OMP (PedvaxHIB® 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 first dose was administered at age 7 through 11 months, administer the second dose at least 4 weeks later and a third (and final) dose at age 12 through 15 months or 8 weeks after second dose, whichever is later, regardless of Hib vaccine used for first dose.
- If first dose is administered at younger than 12 months of age and second dose is given between 12 through 14 months of age, a third (and final) dose should be given 8 weeks later.
- For unvaccinated children aged 15 months or older, administer only 1 dose.

⁴ Pneumococcal vaccines [Minimum age: 6 weeks for pneumococcal conjugate vaccine (PCV).

- Administer 1 dose of PCV 13 to all healthy children aged 24 months through 59 months who are not completely vaccinated for their age.

⁵ Inactivated poliovirus (IPV) vaccine

- In the first 6 months of life, minimum age and minimum intervals are only recommended if the person is at risk for imminent exposure to circulating poliovirus (i.e., travel to a polio-endemic region or during an outbreak).
- If 4 or more doses are administered before age 4 years, an additional dose should be administered at age 4 through 6 years and at least 6 months after the previous dose.
- A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months after the previous dose.
- 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.

⁶ **Measles, mumps, and rubella (MMR) vaccine**

- Ensure that all school-aged children and adolescents have had 2 doses of MMR vaccine; the minimum interval between the 2 doses is 4 weeks.

⁷ **Varicella Vaccine**

- The second dose may be administered before 4 years of age, provided at least 3 months have elapsed since the first dose. If the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid.

Table 2. Catch-up Schedule for Persons Aged 7 Through 18 Years

Vaccine	Minimum Age for Dose ¹	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4
Tetanus, Diphtheria / Tetanus, Diphtheria, Pertussis¹	7 yrs¹	4 weeks	4 weeks if first dose administered at younger than age 12 months 6 months if first dose administered at age 12 months or older and then no further doses needed for catch up	6 months if first dose administered at younger than age 12 months
Hepatitis B²	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)	
Inactivated Poliovirus³	6 wks	4 weeks	4 weeks³	6 months³
Measles, Mumps, Rubella⁴	12 mos	4 weeks		
Varicella⁵	12 mos	3 months if the person is younger than age 13 years 4 weeks if the person is age 13 years or older		

¹ **Tetanus and diphtheria toxoids vaccine (Td) and tetanus and diphtheria toxoids and acellular pertussis (Tdap) vaccine**

- Persons aged 7 years and older who are not fully immunized with DTaP vaccine should receive Tdap vaccine as 1 (preferably the first) dose in the catch-up series; if additional doses are needed, use Td vaccine. For children 7 through 10 years who receive a dose of Tdap as part of the catch-up series, an adolescent Tdap vaccine dose at age 11 through 12 years should NOT be administered. Td should be administered instead 10 years after the Tdap dose.
- 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.
- Inadvertent doses of DTaP vaccine:
 - If administered inadvertently to a child aged 7 through 10 years may count as part of the catch-up series. This dose may count as the adolescent Tdap dose, or the child can later receive a Tdap booster dose at age 11 through 12 years.
 - If administered inadvertently to an adolescent aged 11 through 18 years, the dose should be counted as the adolescent Tdap booster.

² **Hepatitis B (HepB) vaccine**

- 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 children aged 11 through 15 years.

³ **Inactivated poliovirus (IPV) vaccine**

- A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months following the previous dose.
- 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 U.S. residents aged 18 years or older.

⁴ **Measles, mumps, and rubella (MMR) vaccine**

- Ensure that all school-aged children and adolescents have had 2 doses of MMR vaccine; the minimum interval between the 2 doses is 4 weeks..

⁵ **Varicella (VAR) vaccine**

- Ensure that all persons aged 7 through 18 years without evidence of immunity (see MMWR 2007;56 [No. RR-4], available at <http://www.cdc.gov/mmwr/pdf/rr/rr5604.pdf>) have 2 doses of varicella vaccine. For children aged 7 through 12 years the recommended minimum interval between doses is 3 months (if the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid); for persons aged 13 years and older, the minimum interval between doses is 4 weeks.