

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 • 2010

(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)		
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 12 months of age 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 ³ if current age is younger than 12 months 8 weeks ³ (as final dose) if current age is 12 months or older and second dose administered at younger than 15 months of age No further doses needed if previous dose administered at age 15 months or older	8 weeks (as final dose) ³ This dose only necessary for children aged 12 months through 59 months who received 3 doses before age 12 months	
Pneumococcal ⁴	6 wks	4 weeks if first dose administered at younger than 12 months of age 8 weeks (as final dose for healthy children) if first dose administered at age 12 months or older or current age 24 through 59 months 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	
Measles, Mumps, Rubella ⁶	12 mos	4 weeks			
Varicella ⁷	12 mos	3 months			

¹ **Hepatitis B vaccine (HepB).**

- Administer the 3-dose series to those who were not previously vaccinated.
- A 2 dose series (separated by at least 4 months) of adult formulation Recombivax HB[®] is licensed for children aged 11 through 15 years.

² **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.

³ **Haemophilus influenzae type b conjugate vaccine (Hib).**

- Hib vaccine is not generally recommended for persons aged 5 years or older. No efficacy data are available on which to base a recommendation concerning use of Hib vaccine for older children and adults. However, studies suggest good immunogenicity in persons who have sickle cell disease, leukemia, or HIV infection, or who have had a splenectomy; administering 1 dose of Hib vaccine to these persons is not contraindicated.
- If the first 2 doses were PRP-OMP (PedvaxHIB[®] or Comvax[®]), and 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 final dose at age 12 through 15 months.

⁴ **Pneumococcal conjugate vaccine (PCV).**

- Administer 1 dose of pneumococcal conjugate vaccine (PCV) to all healthy children aged 24 through 59 months who have not received at least 1 dose of PCV on or after age 12 months.
- For children aged 24 through 59 months with underlying medical conditions, administer 1 dose of PCV if 3 doses were received previously or administer 2 doses of PCV at least 8 weeks apart if fewer than 3 doses were received previously.
- Administer pneumococcal polysaccharide vaccine (PPSV) to children aged 2 years or older with certain underlying medical conditions including a cochlear implant, at least 8 weeks after the last dose of PCV. See MMWR 1997;46 (No. RR-8).

⁵ **Inactivated poliovirus vaccine (IPV).**

- The final dose in the series should be administered on or after the fourth birthday and at least 6 months following 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 following the previous dose.
- 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).

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

- Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 28 days have elapsed since the first dose.
- If not previously vaccinated, administer 2 doses with at least 28 days between doses.

⁷ **Varicella Vaccine.**

- Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 3 months have elapsed since the first dose.

- For persons aged 12 months through 12 years, the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days 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 Dose1	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	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 weeks	6 months
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 vaccine (Tdap).**

- Doses of Dtap are counted as part of the Td/Tdap series.
- Tdap should be substituted for a single dose of Td in the catch-up series or as a booster for children aged 10 through 18 years; use Td for other doses.

² **Hepatitis B vaccine (HepB).**

- Administer the 3-dose series to those who were not previously vaccinated.
- A 2 dose series (separated by at least 4 months) of adult formulation Recombivax HB[®] is licensed for children aged 11-15 years.

³ **Inactivated poliovirus vaccine (IPV).**

- 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.

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

- If not previously vaccinated, administer 2 doses with at least 28 days between doses.

⁵ **Varicella Vaccine.**

- For persons aged 12 months through 12 years, the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days after the first dose, it can be accepted as valid.
- For persons aged 13 years and older, the minimum interval between doses is 28 days.