

A Quick Look at Using Diphtheria, Tetanus, Pertussis (DTaP) Vaccine

Use DTaP for children 6 weeks through 6 years of age

Schedule

- Routinely given at 2, 4, 6, and 15-18 months of age, and at 4-6 years of age
 - The 4th dose can be given at 12 months of age if 6 months have elapsed since the 3rd dose
 - A 5th dose is not necessary if the 4th dose is given at/after age 4 years

Catch-Up Schedule

- Minimum intervals between doses:
 - 4 weeks between dose 1 & 2
 - 4 weeks between dose 2 & 3
 - 6 months between dose 3 & 4 (and age 12 months or older)
 - 6 months between dose 4 & 5 (and age 4 years or older)

WOUND CARE

- If the wound is not clean and/or not minor and the child is aged 6 weeks through 6 years:
 - Assure the child's DTaP series is up to date
 - Administer DTaP if a dose is needed
- For further information on wound care, see "Tetanus Prophylaxis Guidelines" at www.michigan.gov/vaccinequicklooks

CONTRAINDICATIONS

- Severe allergic reaction (e.g., anaphylaxis) after a previous dose of vaccine or to a vaccine component
- Encephalopathy (e.g., coma, decreased level of consciousness, or prolonged seizures) not due to another identifiable cause within 7 days after vaccination with a pertussis-containing vaccine

PRECAUTIONS

- Moderate or severe illness with or without fever
- Progressive neurologic disorder, including infantile spasms, uncontrolled seizures, or progressive encephalopathy; defer DTaP until neurologic status clarified and stabilized
- History of Guillain-Barré syndrome within 6 weeks after previous dose of a tetanus-containing vaccine
- History of severe Arthus-type hypersensitivity reactions after a previous dose of tetanus- or diphtheria-containing vaccines; defer vaccination until at least 10 years have elapsed since the last tetanus-containing vaccine, even for tetanus prophylaxis as part of wound management

CONDITIONS FOR WHICH VACCINE MAY BE ADMINISTERED

- Fever within 48 hours after a previous dose
- Collapse or shock-like state within 48 hours after a previous dose
- Persistent inconsolable crying lasting greater than or equal to 3 hours within 48 hours after a previous dose
- History of seizure with or without fever within 3 days after a previous dose
- Family history of seizures or sudden infant death syndrome
- Family history of an adverse event after DTP or DTaP administration
- Stable neurologic conditions (e.g., cerebral palsy, well-controlled seizures, or developmental delay)

Vaccine Administration

- Administer **intramuscular (IM)** in the anterolateral thigh or deltoid of the arm
- 1- to 1.5-inch needle; 22-25 gauge
- Use professional judgment when selecting needle length
- Can be given with other vaccines at the same visit
 - Use separate sites, space at least 1-inch apart

Storage and Handling

- Store vaccine in the refrigerator at **36°F to 46°F (2°C to 8°C)**
- Do **not** freeze
- Pharmaceutical-grade (purpose-built) units are preferred for vaccine storage
- Keep in the original box
- Shake well before use
- Store apart from similar vaccines (Tdap, Td)

FURTHER POINTS

- Ensure you use the right vaccine for the right age!
 - Refer to “A Quick Look at Using Tdap/Td” for updated information on these vaccines at www.michigan.gov/vaccinequicklooks
- Different brands of DTaP vaccine can be used if the provider does not know or have the brand of DTaP used for prior doses
- All doses in the series are needed to ensure protection; use the Michigan Care Improvement Registry (MCIR) reminder/recall for children who are missing doses of DTaP
- DTaP is not routinely recommended or licensed for persons aged 7 years or older
- For those with an incomplete DTaP vaccine history, the vaccine series does not need to be restarted regardless of the time that has elapsed between doses
- Due to concern about adverse reactions, the total number of diphtheria- and tetanus-containing vaccines received **should not** exceed 6 doses before the 7th birthday; only documented doses count toward the maximum of 6 doses
- The risk of febrile seizure with DTaP vaccine administered at the same time as pneumococcal conjugate vaccine (PCV13) or inactivated influenza vaccine (IIV) is small; it is recommended to not miss an opportunity and administer these vaccines simultaneously
- When using combination vaccines containing DTaP, follow the minimum age (6 weeks) and intervals for each antigen
- Use CDC’s catch-up job aid, “Catch-Up Guidance for Children 4 Months through 6 Years of Age: DTaP/DT” at www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html for children who are behind on their DTaP series
- Tdap given as part of the DTaP series is a medical error; steps should be taken to avoid this error
 - Tdap given to a child younger than age 7 years as dose 1, 2, or 3 of the DTaP series is invalid and DTaP should be administered as soon as possible
 - Tdap given to a child younger than age 7 years as dose 4 or 5 of the DTaP series should be counted as a valid DTaP dose; Tdap should still be given at age 11-12 years
- Diphtheria and Tetanus (DT) vaccine should only be used in children with a valid contraindication to a previous dose of pertussis containing vaccine; VFC providers must discuss DT use with VFC program before ordering the vaccine
- Diphtheria, tetanus, or pertussis infections do not necessarily confer immunity against re-infection: therefore, vaccination should continue according to the recommended schedule
- The DTaP Vaccine Information Statement (VIS), including information about MCIR, can be found at www.michigan.gov/immunize or your local health department
- A multiple vaccine VIS, “Your Baby’s First Vaccines,” includes DTaP vaccine; it can be used when routine vaccines are given
 - It may be used for children through 6 years of age
 - This VIS can be used when giving combination vaccines in which the vaccine components are listed on the VIS such as: Pediarix® (DTaP-HepB-IPV), Pentacel® (DTaP-IPV/Hib), Kinrix® (DTaP-IPV), or Quadracel® (DTaP-IPV)
 - Give all 3 pages and remember to check the boxes of the vaccines that are to be given
 - The “Multiple Vaccine” VIS, including information about MCIR, can be found at www.michigan.gov/immunize or your local health department
- Document as “DTaP” in MCIR, on the vaccine administration record, and on the immunization record card

Publicly purchased DTaP vaccine can be administered to eligible children 6 weeks through 6 years of age through the Vaccines for Children (VFC) Program. Eligible children include those who are uninsured, underinsured, Medicaid eligible, Native American, or Alaskan Natives. Contact your local health department for more information.

For additional information: MMWR: “Prevention of Pertussis, Tetanus, and Diphtheria with Vaccines in the United States: Recommendations of the ACIP” (April 27, 2018) at www.cdc.gov/vaccines.