

A Quick Look at Using Tdap (Tetanus, diphtheria, pertussis) Vaccine

Tdap Vaccines

- Boostrix®: for persons aged 10 years and older¹
- Adacel®: for persons aged 10 through 64 years¹

Routine Indications for Use and Schedule

- Administer a **single Tdap dose** to:
 - Adolescents 11-12 years of age
 - Pregnant women during **every** pregnancy, prefer in early part of gestational weeks 27-36 (see Special Situations)

Catch-up Schedule (see Special Situations)

- Administer a single Tdap dose to:
 - Persons 13 years and older with no documented Tdap dose
 - Children 7-10 years of age with an incomplete DTaP series²

Minimum interval³

- To ensure pertussis protection, administer a single Tdap dose regardless of the interval since last tetanus- and diphtheria-containing vaccine (DTaP, Td)

Vaccine Administration

- Administer **intramuscular (IM)** in the deltoid of the arm (preferred) or anterolateral thigh
- 1- to 1.5-inch needle; 22-25-gauge
- Use professional judgment when selecting needle length
- Can be given simultaneously with other vaccines
 - 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 with lid on
- Shake well before use
- Store apart from similar vaccines (DTaP, Td)

Recommendations for pregnant women (all ages)

- Administer 1 dose of Tdap to pregnant women during **every pregnancy**; optimal timing is during the early part of gestational weeks 27 and 36
 - Tdap may be given in any trimester, if indicated (i.e., wound management or incomplete series)
 - If Tdap was not administered prior to or during pregnancy, give 1 Tdap dose immediately postpartum

Catch-up recommendations⁴ for children aged 7-10 years

- For children with an incomplete DTaP/Td series² or who have an unknown history of DTaP/Td vaccination:
 - Give 1 Tdap dose; if needed, complete primary series with Td (possibly 1-2 doses); ensure to meet minimum intervals
- Children aged 7–10 years who receive Tdap as part of the catch-up series **should receive** the routine Tdap dose at age 11–12 years

Catch-up recommendations⁴ for persons aged 7-18 years

- Adolescents aged 13-18 years who have not received Tdap: give 1 dose of Tdap, regardless of the interval since the last tetanus- or diphtheria-containing vaccine; then give a Td booster every 10 years
- Persons aged 7-18 years not fully immunized with a childhood DTaP series²; give 1 dose of Tdap as part of the catch-up series; if additional doses are needed give Td, using appropriate minimum intervals; then give a Td booster every 10 years

Catch-up recommendations for persons aged 19 years and older, including Health Care Personnel

- Persons aged 19 years and older who have not received Tdap: give 1 Tdap dose, regardless of the interval since the last tetanus-, or diphtheria-containing vaccine; then give a Td booster every 10 years
- Persons who do not have a primary vaccination series for tetanus, diphtheria, and pertussis: give 1 dose of Tdap, followed by a Td dose 4 weeks later, then another Td dose 6-12 months after previous Td; then give a Td booster every 10 years

Recommendations for persons with close contact to an infant less than age 12 months

- If no previous documented dose, give Tdap as soon as feasible—preferably at least 2 weeks before contact with infant

Use of Tdap for wound care (for wounds that are not clean and/or not minor)

- If a tetanus-containing vaccine is indicated and Td is not available, Tdap may be administered

- Administer Tdap to persons aged 11 years and older who have not received any tetanus-containing vaccine in the last 5 years and have no previous Tdap vaccine dose
- For further guidance on wound care: review “Tetanus Prophylaxis Guidelines,” at www.michigan.gov/vaccinequicklooks

CONTRAINDICATIONS

- Allergic reaction to a previous dose of Tdap/DTaP/DT/Td vaccine or any of its components
- 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 acute illness with or without fever
- History of Guillain-Barré Syndrome (GBS) within 6 weeks after a prior dose of a tetanus-containing vaccine
- Progressive or unstable neurological disorder including uncontrolled seizures or progressive encephalopathy; defer Tdap until treatment has been established and condition has stabilized
- History of severe Arthus-type reaction after a previous dose of a tetanus- or diphtheria-containing vaccine; defer vaccination until at least 10 years have elapsed since last tetanus-containing vaccine, even for tetanus prophylaxis as part of wound management

FURTHER POINTS

- **Do not** miss an opportunity to provide pertussis protection—there is no minimum interval between Tdap and last Td
- A history of well-controlled seizures, family history of seizures, or other neurologic disorder are not considered to be a contraindication or precaution to vaccination with pertussis-containing vaccine
- Tetanus, diphtheria, or pertussis infections do not necessarily confer immunity against re-infection: therefore, vaccination should continue according to the recommended schedule
- DTaP inadvertently given to a **fully vaccinated** child aged 7-10 years, count dose as the routine adolescent Tdap dose
- DTaP inadvertently given to an **undervaccinated** child aged 7-10 years, count as Tdap dose in the catch-up series; child should receive adolescent Tdap dose at 11-12 years of age
- DTaP inadvertently given at 11 years and older should count as the Tdap dose
- Tdap inadvertently given to a **fully vaccinated** child aged 7-10 years is invalid, should give routine Tdap dose at 11 -12 years
- The Tdap Vaccine Information Statement (VIS), including information about the Michigan Care Improvement Registry (MCIR), can be found at www.michigan.gov/immunize or your local health department
- Ensure you use the right vaccine for the right age; refer to “A Quick Look at Using DTaP” and “A Quick Look at Using Td” for updated information on these vaccines at www.michigan.gov/vaccinequicklooks
- Document as “Tdap” in MCIR, on the vaccine administration record, and on the immunization record card

¹In situations where Tdap is indicated, either Adacel or Boostrix may be used for persons aged 7-10 years. Boostrix should be used for persons aged 65 years and older; however, Adacel is recommended for use if Boostrix is not readily available.

²A complete DTaP series is 5 doses or 4 doses with 1 dose at/after age 4 years that meet minimum age/interval recommendations

³While longer intervals between Td (or DTaP) and Tdap vaccination may decrease the severity of local reactions (pain, redness, swelling), the benefits of protection against pertussis need to be considered and likely outweigh the potential risk of this adverse event.

⁴Use CDC’s catch-up job aid, “Catch-Up Guidance for Children 7 through 18 Years of Age: Tdap/Td” at www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html#guidance

Publicly purchased Tdap vaccine can be administered to eligible children aged 7 through 18 years 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. Tdap is also available through the Michigan Adult Vaccine Replacement Program (MI-VRP) and through Adult Medicaid. For persons covered by Adult Medicaid, private stock should be used and billed to Medicaid. 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.