

# A Quick Look at Using Tdap/Td (Tetanus, diphtheria, and pertussis) Vaccines

## Tdap (Tetanus, diphtheria, and pertussis) Vaccines

- Boostrix® for persons aged 10 years and older<sup>1</sup>
- Adacel® for persons aged 10 through 64 years<sup>1</sup>

## Td (Tetanus, diphtheria) Vaccines

- Tenivac® and TDVAX™ for persons aged 7 years and older

## Routine Indications for Use and Schedule

- Administer a **Tdap dose** to
  - Adolescents 11-12 years of age
  - Pregnant women during **every** pregnancy, prefer in early part of gestational weeks 27-36
- Administer a **Td dose** to those with a valid pertussis allergy

## Catch-up Schedule (see catch-up guidance below)<sup>2,3</sup>

- Minimum interval between doses:
  - Dose 1 to 2: 4 weeks
  - Dose 2 to 3: varies\*
  - Dose 3 to 4 is 6 months

\*8 weeks if 1<sup>st</sup> dose given less than 12 months of age OR  
6 months if 1<sup>st</sup> dose given at 12 months of age and older

## 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 similar vaccines apart (DTaP, Td, Tdap)

## Catch-up Guidance

- **Persons aged 13 years and older who have not received Tdap:** 1 Tdap dose, then give Td or Tdap booster every 10 years
- **Persons aged 7 years and older without a primary vaccination series for tetanus, diphtheria, and pertussis<sup>2,3</sup>:** 1 Tdap dose as part of the catch-up series (preferably the first dose); if additional doses are needed, use Td or Tdap
  - The 3 dose schedule is a dose of Tdap (preferably the first dose), followed by a dose of Td or Tdap at least 4 weeks after and another dose of Td or Tdap 6 to 12 months later
- **Tdap administered at 7–10 years**
  - Children aged 7–9 years who receive Tdap should receive the routine Tdap dose at age 11–12 years
  - Children aged 10 years who receive Tdap do not need to receive the routine Tdap dose at age 11–12 years
- **DTaP inadvertently administered at or after age 7 years:**
  - Children aged 7–9 years: DTaP may count as part of catch-up series (if undervaccinated). Give routine Tdap dose at age 11–12 years
  - Children aged 10–18 years: Count dose of DTaP as the adolescent Tdap booster
- To ensure pertussis protection, administer a Tdap dose regardless of the interval since last tetanus- and diphtheria-containing vaccine (DTaP, Td). The benefits of protection against pertussis need to be considered and likely outweigh the potential risk of a severe local reaction (pain, redness, swelling)
- CDC has developed catch-up guidance job aids to assist in interpreting the child and adolescent catch-up schedule
  - Use 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](http://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html#guidance)

## 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

- Pregnant women with a complete childhood DTaP series and were last vaccinated more than 10 years ago should receive a booster dose of tetanus-containing vaccine to prevent neonatal tetanus, Tdap during pregnancy provides this protection
- Pregnant women without a complete diphtheria-, tetanus-, pertussis-containing vaccine history should follow the catch-up schedule to ensure protection (see catch-up guidance above)

### **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)**

- Persons aged 7 years and older who are not fully immunized against pertussis, tetanus or diphtheria should receive 1 dose of Tdap for wound management and as part of the catch-up series
- Tdap is preferred to Td for persons aged  $\geq 11$  years who have not previously received Tdap or who's Tdap history is unknown
- For further guidance on wound care: review "Tetanus Prophylaxis Guidelines," at [www.michigan.gov/vaccinequicklooks](http://www.michigan.gov/vaccinequicklooks)

### **CONTRAINDICATIONS**

- **Tdap and Td:** Allergic reaction to a previous dose of Tdap/DTaP/DT/Td vaccine or any of its components
- **Tdap:** 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**

#### **Tdap and Td:**

- 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
- 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
- **Tdap:** Progressive or unstable neurological disorder including uncontrolled seizures or progressive encephalopathy; defer Tdap until treatment has been established and condition has stabilized

### **FURTHER POINTS**

- 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
- The Tdap and Td Vaccine Information Statement (VIS), including information about the Michigan Care Improvement Registry (MCIR), can be found at [www.michigan.gov/immunize](http://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" for updated information on this vaccine at [www.michigan.gov/vaccinequicklooks](http://www.michigan.gov/vaccinequicklooks)
- Document as "Tdap" or "Td" in MCIR, on the vaccine administration record, and on the immunization record card

<sup>1</sup>In 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.

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

<sup>3</sup>Number of doses needed to complete the series depends on age at the 1<sup>st</sup> dose: If 1<sup>st</sup> dose given less than 12 months, 4 doses are recommended BUT if 1<sup>st</sup> dose given at 12 months or older, 3 doses are recommended.

Publicly purchased Tdap and Td 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 and Td are also available through the Michigan Adult Vaccine Program (MI-AVP) and through Adult Medicaid. For persons covered by Adult Medicaid, private stock should be used and billed to Medicaid. For current DTaP/Tdap/Td recommendations visit [www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/dtap.html](http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/dtap.html).