

Tdap Vaccination Recommendations During California's Pertussis Epidemic

During the current pertussis epidemic in California the California Department of Public Health and the Los Angeles County Department of Public Health recommend that all persons aged 7 years and older indicated for immunization against tetanus, diphtheria or pertussis be immunized with Tdap (see footnote 1). The only reasons not to provide Tdap are documentation of a prior dose or a valid contraindication. Infants and young children should always complete the DTaP schedule in a timely manner but especially during the epidemic.

Tdap Vaccination Schedule:

Age Groups	Dose	Route	# of Doses
11-64 years	0.5 mL	IM	Single lifetime dose
7-10 years & 65 years and older (see footnote 1)		(Intramuscularly)	

Priority Groups for Tdap Vaccination:

- **Women of childbearing age:** All women of childbearing age should be vaccinated with a single dose of Tdap, preferably before pregnancy, but otherwise during or after pregnancy. Pregnancy is not a contraindication to Tdap vaccination (see footnote 2).
- **Other close adolescent and adult contacts of infants:** All close contacts of infants without documentation of Tdap vaccination, especially parents and childcare providers, should be immunized before the mother and baby are discharged after birth, regardless of when the contacts received any prior doses of Td (see footnotes 1, 2 and 3).
- **Patients with wounds:** Administer Tdap (instead of Td or TT) whenever tetanus toxoid is indicated for wound management in patients 7 years of age and older, including person 65 and older (see footnote 1).
- **Health care personnel:** All health care personnel, particularly those who have direct contact with infants and pregnant women should be immunized with Tdap to protect their patients and themselves, regardless of their age and time since last Td (see footnotes 1, 2 and 3).

Other Groups That Need Tdap Vaccination:

- **Adolescents** (11-18 years of age) should receive a single Tdap dose instead of Td for booster immunization against tetanus, diphtheria and pertussis if they have completed the recommended childhood DTP/DTaP vaccination series and have not previously received Tdap. The preferred age for Tdap is 11-12 years.
- **Adolescents** who received Td but not Tdap are encouraged to receive a single dose of Tdap to provide protection against pertussis if they completed the recommended childhood DTP/DTaP vaccination series. During the pertussis epidemic any interval between Td and Tdap is permitted. (See footnote 3)
- **Adolescents** who have never received pertussis vaccines but completed the recommended tetanus-diphtheria vaccination series with pediatric DT or Td may receive Tdap if they do not have a contraindication to the pertussis components.
- **Adults** (including persons 65 and over [see footnote 1]) should receive a single dose of Tdap to replace a single dose of Td for booster immunization against tetanus, diphtheria, and pertussis if they received their most recent tetanus toxoid-containing vaccine (e.g., Td) ≥ 10 years earlier.
- **Children** (7 through 10 years), **Adolescents** and **Adults** (including person 65 years and older) who have never received tetanus-diphtheria containing vaccines should receive a series of 3 vaccinations. The preferred schedule is one dose of Tdap, followed by a dose of Td ≥ 4 weeks later and then another dose of Td ≥ 6 months later. However, Tdap may substitute for any one of the 3 Td doses in the series. (see footnote 1)
- **Children** (7-10 years) who did not complete the DTP/DTaP vaccine series are recommended to receive a single dose of Tdap if there are no vaccine contraindications. If additional doses are needed to complete the tetanus-diphtheria series use Td. (see footnote 1)

Contraindications:

- Anaphylaxis following a prior dose of a vaccine containing any of the three components of Tdap
- Encephalopathy within 7 days of administration of a pertussis vaccine that is not attributable to another identifiable cause

Precautions:

- Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of tetanus-toxoid-containing vaccine

- Arthus-type hypersensitivity reaction following a prior dose of tetanus toxoid. Persons with history of Arthus-type hypersensitivity reactions should not be given even emergency doses of Td or Tdap more frequently than every 10 years, even if the wound is neither clean nor minor.
- Progressive neurological disorder, uncontrolled epilepsy, or progressive encephalopathy until a treatment regimen has been established and the condition stabilized
- Latex allergy for Boostrix supplied in syringes (do not use this product if there is a history of a severe [anaphylactic] allergy to latex; can use in less severe allergies). Boostrix single dose vials and Adacel does not contain latex.
- Acute moderate or severe illness with or without fever

Adverse Reactions:

- Soreness, erythema, and induration at the injection site
- Headache, fatigue, fever
- Exaggerated local (Arthus-like) reactions are occasionally reported after diphtheria-or-tetanus-containing vaccine
- Rarely, anaphylaxis or generalized urticaria have been reported after tetanus toxoid administration
- Rarely, Guillain-Barré Syndrome (GBS) and brachial neuritis have been reported following tetanus toxoid administration

Vaccine Storage:

- Keep vaccine refrigerated between 35° - 46° F (2° - 8° C). DO NOT freeze.

Footnotes:

1. **Off-Label Tdap Vaccination Recommendations for Children 7-9 years and Adults 65 years and older:**
 - **Children 7-9 Years:** Administer a single dose of Tdap to children 7 through 9 years of age if vaccination against tetanus, diphtheria, or pertussis is indicated. Existing data suggest that the use of Tdap at these ages is safe; in Canada, Tdap is licensed for persons 4 years of age and older. Boostrix is licensed for children aged 10 years.
 - **Adults aged 65 years and older:** Administer a single dose of Tdap to persons 65 years of age and older if vaccination against tetanus, diphtheria, or pertussis is indicated. Local and systemic events after Tdap vaccination have been reported less frequently in adults less than 65 years than in adolescents. Published data on the safety and vaccine efficacy of Tdap in persons 65 years and older are limited. Even if the immunogenicity of Tdap is found to decline with age, any additional protection provided could help to limit transmission and protect vulnerable persons.
2. **Pregnancy:** Pregnancy is not a contraindication to Tdap.
 - Health-care providers may choose to administer Tdap during pregnancy (preferably the second or third trimester) to protect against pertussis in special circumstances such as:
 - Pregnant women living in communities with increased pertussis activity (as is the current situation in LA County and the rest of California)
 - Pregnant adolescents for routine or “catch-up” vaccination because the incidence of pertussis is high among adolescents,
 - Pregnant health-care personnel and child care providers working with infants less <1 year of age and other vulnerable populations, and
 - Pregnant women employed in an institution
 - Also a provider may choose to administer Tdap instead of Td to pregnant women who received the last Td vaccination 10 or more years previously or to a pregnant woman who has never received the tetanus-diphtheria primary series (Tdap replacing one dose of Td).
 - Pregnant women should be advised that there is limited data on the safety, immunogenicity, and outcomes of pregnancy in pregnant women who receive Tdap. Also, it is unknown if Tdap given in pregnancy will interfere with the infant’s immune response to vaccination. However, during the epidemic health authorities believe the benefits outweigh the risk. Pertussis is circulating widely, resulting in the hospitalization and death of young infants who are too young to be fully immunized against pertussis. Close contacts, most often mothers, are the most common known source of pertussis in infants.
 - Providers are encouraged to report Tdap administrations to pregnant women regardless of the trimester, to the appropriate manufacturer's pregnancy registry: for Boostrix® to GlaxoSmithKline Biologicals at 1-888-825-5249, or for Adacel®, to sanofi pasteur at 1-800-822-2463.
3. **Shorter intervals between Td and Tdap:** During an epidemic any interval between doses of Td and Tdap is permitted. A local reaction at the injection site may be more likely after an increased number of prior doses; however, recent studies and reports suggest that doses of Tdap given after previous Td or DTaP are well tolerated at intervals as brief as 1-18 months. An undocumented history of immunization with Tdap or Td is not a valid reason to avoid or delay administration of Tdap.

