DEPARTMENT OF HUMAN SERVICES
HEALTH SERVICES, OFFICE OF FAMILY HEALTH
IMMUNIZATION PROGRAM

DT (PEDIATRIC)
Diphtheria and Tetanus Toxoids

I. ORDER:

1. Screen for contraindications
2. Provide the current Vaccine Information Statement (VIS), answering questions
3. Obtain a signed Vaccine Administration Record (VAR)
4. Give DT vaccine (0.5 ml), intramuscularly (IM) according to the age-appropriate schedule and situation, infants or children under seven years of age.
   a. DT should be used if encephalopathy occurred within 7 days after administration of a previous dose of pertussis-containing vaccine.
   b. Give simultaneously with all routine childhood immunizations according to the age and immunization status of the recipient.

Signature Health Officer or Medical Provider Date

II. LICENSED DT VACCINES

Product Name	Vaccine Components	Acceptable Age Range	Thimerosal
Diphtheria/Tetanus Pediatric	DT	6 weeks through 6 years of age	Multi-dose vial= 25 mcg mercury/0.5ml
			Single-dose vial = Trace

III. VACCINE SCHEDULE

Dose/Route: 0.5 mL IM

DOSE[1,2]	MINIMUM AGE[3,4]	MINIMUM SPACING[3,4]	RECOMMENDED AGE
1	6 weeks	Not Applicable	2 months
2	10 weeks	4 weeks after dose #1	4 months
3	14 weeks	4 weeks after dose #2	6 months
4[5]	12 months	6 months after dose #3	15 months[6]
5[7]	4 years	6 months after dose #4	4 years

[1] If 6 doses or more of DT have been given before age 7 years, a booster is due 10 years after the 6th dose. If a child less than 4 years of age has had 5 doses of DT (valid and invalid doses), the 6th dose will be forecast at age 4-5 years of age and 6 months after dose 5. A booster is due 10 years after the 6th dose.

[2] Td should not be given before 7 years of age. However, If Td appears in a patient's history before the minimum acceptable age of 7 years, for retrospective analysis it will be treated as DTaP, DTP, or DT.

[3] For retrospective checking, doses that violate the minimum spacing or age by 4 or fewer days do not need to be repeated. Doses administered 5 days or earlier than the minimum interval or age should be repeated as age-appropriate.

[4] When an invalid dose needs to be repeated, the repeat dose should be spaced after the invalid dose by a time equal to or greater than the minimum interval between doses.

[5] While the recommended minimum spacing between DT3 and DT4 is ≥6 months, if DT4 is administered ≥4 months after DT3 it does not need to be repeated.

[6] If the interval between the 3rd and 4th dose is ≥6 months, and the child is not likely to return at the recommended age, the fourth dose of DT may be given as early as 12 months of age.

[7] Dose 5 is unnecessary if dose 4 was given on or after the 4th birthday.

Note: If a child is older than 1 year at the time the first dose of DT is given, a third dose given 6-12 months after the second dose completes the primary series (The booster is to be given at a minimum of 4 years of age and at least 6 months after dose 3).

IV. CONTRAINDICATIONS

A. History of anaphylactic reaction (hives, swelling of the mouth and throat, difficulty breathing, hypotension or shock) to thimerosal or following any prior dose of a Diphtheria and Tetanus-containing vaccine

B. Any neurological reaction following a prior dose of DT vaccine.

C. Defer vaccination with DT to persons with moderate or severe illness with or without fever until the symptoms have resolved. Persons with mild illness (e.g. upper respiratory infection with or without low grade fever) may be vaccinated.

V. PRECAUTIONS

A. In the case of infant or child with an underlying neurologic disorder, proven or suspected, DT should not be given until a physician has determined the infant's neurological status. Further doses of DTaP vaccine are considered contraindicated.

B. Children with impaired immune responses, i.e., immuno-suppressive therapies (including irradiation, corticosteroids, antimetabolites, alkylating agents, and cytotoxic drugs), a genetic defect, or HIV infection may experience a reduced immune response to vaccines. Deferring DT may be considered in children receiving immunosuppressive therapy.

C. For persons known to have developed Guillain-Barré syndrome (GBS) within 6 weeks of a previous tetanus toxoid containing vaccine the decision to give additional doses of DT should be based on consideration of the benefit of further vaccination versus the risk of recurrence of GBS.

VI. SIDE EFFECTS AND ADVERSE REACTIONS

Events	**Frequency**
Local:	
- Tenderness	Common but usually self-limited
- Erythema	Common but usually self-limited
- Induration	Common but usually self-limited
Mild Systemic:	
- Nodule at injection site (for several weeks)	Occasional
- Fever	Common
- Drowsiness	Common
- Fretfulness	Common
- Anorexia	Occasional
Severe Systemic:	
- Generalized urticaria	Rare
- Anaphylaxis	Rare
- Neurologic events	Rare

Other: Persons experiencing an Arthus-type hypersensitivity reaction or a fever higher than 103°F (39.4°C) following a prior dose of tetanus toxoid usually have high serum tetanus antitoxin levels. Because these persons are at increased risk of hypersensitive reaction to immunization, do not give them DT or emergency doses of Td more frequently than every 10 years, even if they have a wound that is neither clean nor minor.

VII. OTHER CONSIDERATIONS

A. Normally no more than 6 doses of a diphtheria/tetanus-containing vaccine are recommended by 7 years of age. However, in some situations, the benefits of a pertussis containing vaccine being added to a DT series needs to be weighed against the risk of a local reaction occurring after receiving 7 or 8 doses of a DT-containing vaccine.

B. Infants under 12 months of age: Should additional doses of pertussis-containing vaccine become contraindicated after a DTP/DTaP series has been initiated, DT should be substituted for each of the remaining scheduled DTP/DTaP doses.

C. Do not restart a series. Give the next dose in the series as close as possible to the spacing guide listed on the schedule. Complete series according to the schedule as close as possible.

D. Children who are foreign-born and who do not have documentation of vaccinations received previously should be considered susceptible and started on the age-appropriate vaccination schedule.

E. Children with well-documented history of pertussis disease (positive culture for *B. pertussis* or a clinical course with epidemiologic linkage to a culture-positive case) should receive DT for the remaining doses of the vaccine.

F. For someone with a history of fainting with injections, a 15-minute observational period is recommended post immunization.

G. Wound Management; see next section.

VIII. TETANUS WOUND MANAGEMENT RECOMMENDATIONS

Vaccination History	Clean, minor wounds		All other wounds	
	DT	**TIG**	**DT**	**TIG**
Unknown or less than 3 doses	Yes	No	Yes	Yes
3 or more doses	No*	No	No**	No

* Yes, if > 10 years since last dose
** Yes, if > 5 years since last dose

TIG=tetanus immune globulin.

Taken from the 2004 “Pink Book” page 67

IX. ADVERSE EVENT REPORTING

Adverse events following immunization should be reported by public providers to the Immunization Program, Health Services, using a Vaccine Adverse Events Reporting System form (VAERS), according to state guidelines. Private providers report all adverse events directly to VAERS.
VAERS phone number: (800) 822-7967, and the website address is www.vaers.org.

Events reportable to VAERS

Vaccine	Illness, disability, injury or condition covered	Time period for 1st symptom or onset of significant reaction following vaccine
Vaccines containing tetanus toxoid (e.g., DT, DTaP, DTP, Td or TT)	1. Anaphylaxis or anaphylactic shock	4 hours
	2. Brachial Neuritis	2-28 days
	3. Any acute complication sequela (including death)	No limit

X. REFERENCES

1. Diphtheria and Tetanus. In: *Epidemiology and Prevention of Vaccine-Preventable Diseases* ("Pink Book"). Atkinson W, Hamborsky J, Wolfe S, eds. 8th ed. Washington, DC: Public Health Foundation, 2004: 55-73. Available at http://www.cdc.gov/nip/publications/pink/dip.pdf.
2. General Recommendations on Immunizations, MMWR Vol. 51, RR-2, 2/8/02.
3. Tetanus Surveillance-United States, 1995-1997*;* MMWR, Vol. 47, SS-2, 7/3/98.
4. Diphtheria, Tetanus, and Pertussis: Recommendations for Vaccine Use and Other Preventive Measures Recommendations of ACIP, MMWR, Vol. 40, RR-10: 8/8/91.
5. Vaccine package inserts.

For more information or to clarify any part of the above order, consult with your health officer or contact Health Services, the Immunization Program, at (503) 731-4020

Visit our website at http://www.healthoregon.org/imm
To request this material in an alternate format (e.g., braille), please call (503) 731-4020.