Standing Orders for Administering Typhoid Vaccine (Pediatric)

Purpose: To reduce morbidity and mortality from disease caused by *Salmonella enterica* serotypes Typhi and Paratyphi by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DOD).

Policy: Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

Procedure:

1. Identify persons 2 – 17 years of age in need of vaccination against typhoid fever based on the following criteria:
   - Anticipated travel to areas where there is a recognized risk for exposure to *S. typhi*
   - Persons with intimate exposure (e.g., household contact) to a documented *S. typhi* chronic carrier
   - Laboratory workers routinely exposed to specimens of *S. typhi*, or who work in laboratory environments where these specimens are routinely handled

2. Screen all patients for contraindications and precautions to typhoid vaccine:

   Contraindications:
   - Oral typhoid vaccine should not be given to immunocompromised persons
   - A history of a serious reaction (e.g., anaphylaxis) after a previous dose of typhoid vaccine or to a vaccine component
   - For information on vaccine components, refer to the manufacturer's package insert or go to http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf

   Precautions:
   - Oral typhoid vaccine should not be given within 3 days (before or after) of an antimicrobial agent
   - Moderate or severe acute illness with or without fever
   - Syncope (fainting) can occur in association with administration of injectable vaccines. Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
   - For questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1 or DSN 761-4245

Note: available data are not sufficient to assess the effects of typhoid vaccine on persons who are pregnant or nursing. Typhoid vaccine should be used during pregnancy or nursing only if benefit clearly outweighs risk; if indicated, inactivated vaccine (ViCPS) may be considered. This is not covered under this standing order; patients must obtain a written order from a privileged provider for this situation

3. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred.

4. Provide vaccine as follows:
   Follow dosing schedules in table below. Patients should complete the Vivotif® regimen ≥1 week prior to exposure; Typhim VI® should be completed 2 weeks prior to exposure. Vivotif® is given orally; Typhim VI® is given intramuscularly in the preferred site (anterolateral thigh for infants and toddlers or in the deltoid for children and adolescents). The alternate site (anterolateral thigh muscle or deltoid muscle) may be used if the preferred site is inadequate.

Needle Length and Injection Site of IM Injections for Children		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	**Needle Length**	**Injection Site**
Toddlers (1-2 years)	1-1.25 inch	Anterolateral thigh*
	5/8† – 1 inch	Deltoid muscle of arm
Children (3-10 years)	5/8† inch- 1 inch	Deltoid muscle of arm*
	1-1.25 inches	Anterolateral thigh
Children (11-18 years)	5/8† – 1 inch	Deltoid muscle of arm*
	1-1.5 inches	Anterolateral thigh

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration
https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html.
†If skin is stretched tightly and subcutaneous tissues are not bunched
*Preferred site

Vaccination	Age	Dose/Route	# of Doses	Interval	Booster
Oral, Live, Attenuated Ty21a Vaccine (Vivotif)†					
Primary series	≥6 years	1 capsule,§ oral	4	48 hours	N/A
Booster	≥6 years	1 capsule,§ oral	4	48 hours	Every 5 years
Vi Capsular Polysaccharide Vaccine (Typhim Vi)					
Primary series	≥2 years	0.5mL, IM	1	N/A	N/A
Booster	≥2 years	0.5mL, IM	1	N/A	Every 2 years

†The vaccine must be kept refrigerated (35.6 - 46.4°F, 2 - 8°C)
§Administer with cool liquid no warmer than 98.6°F (37°C)

5. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

6. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

7. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at https://vaers.hhs.gov.

8. This policy and procedure shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date