Standing Order for Administering *Haemophilus influenzae* type b Vaccine (Pediatric)

Purpose: To reduce morbidity and mortality from disease caused by *Haemophilus influenzae* type b by vaccinating all individuals 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 this standing order, eligible health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

Procedure:

1. Identify individuals 6 weeks – 17 years of age in need of vaccination against *Haemophilus influenzae* type b based on the following criteria:
    - Age 2 – 59 months and no documented receipt of a complete series of *Haemophilus influenzae* type b vaccine (Hib) at the appropriate ages and intervals
    - At increased risk for *Haemophilus influenzae* type b disease due to:
        - Anatomic or functional asplenia (including sickle cell disease)
        - Chemotherapy or radiation treatment
        - Elective splenectomy
        - Hematopoietic stem cell transplant (HSCT)
        - History of invasive *Haemophilus influenzae* type b disease
        - HIV infection
        - Immunoglobulin deficiency or early component complement deficiency

2. Using DD Form 3110, screen all patients for contraindications and precautions to Hib:

    Contraindications:

    - History of a serious reaction (e.g., anaphylaxis) after a previous dose of Hib or to a vaccine component, to include neomycin, streptomycin, polymyxin B, or yeast, or to vaccines containing:
        - Diphtheria toxoid (Pentacel, Vaxelis)
        - Hepatitis B (Vaxelis)
        - Pertussis (Pentacel, Vaxelis)
        - Poliovirus (Pentacel, Vaxelis)
        - Tetanus toxoid (Hiberix, Pentacel, Vaxelis)
    - Vaxelis only:
        - History of encephalopathy (e.g., coma, decreased LOC, prolonged seizures) within 7 days of a dose of a pertussis-containing vaccine, that is not attributable to another cause
        - Progressive neurologic disorder (e.g., infantile spasms, uncontrolled epilepsy, or progressive encephalopathy) until the condition has stabilized
    - For information on vaccine components, refer to the package insert for ActHIB, Hiberix, PedvaxHIB, Pentacel, Vaxelis, or The CDC Pink Book Appendix B.

    Precautions:

    - Moderate or severe acute illness with or without fever
    - PedvaxHIB only: vial stopper contains dry natural latex rubber
    - Pentacel and Vaxelis only: history of fever ≥ 40.5°C / 104.9°F, hypotonic-hyporesponsive episode

(HHE), persistent, inconsolable crying lasting ≥ 3 hours within 48 hours after a pertussis-containing vaccine, or seizures within 3 days after a pertussis-containing vaccine

- For questions or concerns, consider consulting the DHA Immunization Healthcare Support Center at (877) 438-8222, Option 1 or DSN 761-4245.

Special Populations:

- **American Indian/Alaska Native:** Hib meningitis incidence peaks at a younger age in this population. Use of a PRP-OMP (PedvaxHIB) 2 dose primary series is preferred (but not required) to provide early protection as this vaccine produces a protective antibody response after the first dose.

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 Hib vaccine as follows:
   - Administer the appropriate vaccine intramuscularly (IM) according to Tables 1 - 3.
   - ActHIB, Hiberix, Pentacel, or Vaxelis*: 4-dose series (3-dose primary series at age 2, 4, and 6 months, booster dose at age 12–15 months)
   - *Vaxelis is not recommended for use as a booster dose.
   - PedvaxHIB: 3-dose series (2-dose primary series at age 2 and 4 months, booster dose at age 12–15 months)
   - Unvaccinated / undervaccinated individuals at increased risk for *Haemophilus in luenzae* type b disease may receive any otherwise-appropriate Hib vaccine according to the schedule in Table 3.
   - Monovalent Hib vaccines are interchangeable: the same product is recommended, but not required, for all doses (primary and booster). If different products are used, the number of doses to complete the series is determined by the product with the most doses (e.g., if more than one brand is used, follow a 3-dose primary schedule with a booster).
   - Ensure minimum ages and intervals have been met for all components of combination vaccines.
   - For more information, refer to the CDC Vaccine Catch-Up Guidance: https://www.cdc.gov/vaccines/hcp/imz-schedules/child-adolescent-catch-up.html.

TABLE 1. IM Needle Length and Injection Site Guide		
Use a 22 – 25-gauge needle. Choose needle gauge and length appropriate to the patient's age		
Patient age	**Needle Length**	**Injection Site**
Infants, 1-12 months	1 inch (25 mm)	Anterolateral thigh
Toddlers, 1-2 years	1-1.25 inch (25-32 mm)	Anterolateral thigh*
	5/8†-1 inch (16-25 mm)	Deltoid muscle of arm
Children, 3-10 years	5/8†-1 inch (16-25 mm)	Deltoid muscle of arm*
	1-1.25 inches (25-32 mm)	Anterolateral thigh
Children & Adolescents, 11-18 years	5/8†-1 inch (16-25 mm)	Deltoid muscle of arm*
	1-1.5 inches (25-38 mm)	Anterolateral thigh

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

TABLE 2. Hib Vaccine Schedule for Unvaccinated* Individuals Who Are NOT at Increased Risk			
Vaccine Type	**Age at Dose 1 (months)**	**Primary Series (minimum interval)**	**Booster**
Monovalent vaccine			
PRP-T: 4-dose series ActHIB (age 2 months – 5 years) Hiberix (age 6 weeks – 4 years)	2 - 6	3 doses (≥ 8 weeks)	Age 12 – 15 months **and** ≥ 8 weeks after last dose
	7 - 11	2 doses (≥ 4 weeks)	
	12 - 14	1 dose	≥ 8 weeks after last dose
	15 - 59	1 dose	NA
PRP-OMP: 3-dose series PedvaxHIB (age 2 months – 5 years)	2 - 6	2 doses (≥ 8 weeks)	Age 12 – 15 months **and** ≥ 8 weeks after last dose
	7 - 11	2 doses (≥ 4 weeks)	
	12 - 14	1 dose	≥ 8 weeks after last dose
	15 - 59	1 dose	NA

*

Combination vaccine†		
DTaP-IPV/Hib: 4-dose series Pentacel (age 6 weeks – 4 years)	See PRP-T primary series dosing Not recommended for use as a booster dose	Age 12 – 15 months **and** ≥ 6 months after last dose
DTaP-IPV-Hib-HepB: 4-dose series Vaxelis (age 6 weeks – 4 years) Minimum age for dose 3: 6 months (due to HepB component)		Not recommended for use as a booster dose

"Unvaccinated" refers to individuals who have not received a Hib primary series and booster dose or ≥ 1 dose after age 14 months.

† Intervals based on DTaP component.

TABLE 3. Hib Vaccine Schedule for Unvaccinated* Individuals Who ARE at Increased Risk		
Risk Factor	**Patient Age**	**Number of Doses (minimum interval)**
Anatomic or functional asplenia	≥ 5 years	1 dose
Anatomic or functional asplenia (including sickle-cell disease), chemotherapy, early complement component deficiency, HIV infection, or immunoglobulin deficiency	12 – 59 months	0 -1 dose received before age 12 months: 2 doses (8 weeks)
		≥ 2 doses received before age 12 months: 1 dose
Elective splenectomy	≥ 15 months	1 dose ≥ 14 days before procedure
Hematopoietic stem cell transplant (regardless of Hib vaccination history)	≥ 6 weeks	3 doses (≥ 4 weeks) beginning 6-12 months after transplant
HIV	5 – 17 years	1 dose
Invasive *Haemophilus influenzae* type b disease (regardless of Hib vaccination history)	< 24 months	Administer complete series for age as soon as possible during convalescent phase
Received Hib vaccine within 14 days of starting or during chemotherapy or radiation treatment	< 5 years	Repeat dose(s) ≥ 3 months after therapy completion

"Unvaccinated" refers to individuals who have not received a Hib primary series and booster dose or ≥ 1 dose after age 14 months.

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) online at https://vaers.hhs.gov. Additional VAERS information is available by telephone at (800) 822-7967.

8. This standing order 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