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

**Purpose:** To reduce morbidity and mortality from *Haemophilus influenzae* type b disease 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 months to 17 years of age in need of vaccination against *Haemophilus influenzae* type b based on the following criteria:
    - Age 2 - 59 months without prior Hib vaccination (or who did not complete the series), immunoglobulin deficiency, early component complement deficiency, or are receiving chemotherapy or radiation therapy
    - Age 2 months through 17 years with human immunodeficiency virus (HIV) infection, anatomic or functional asplenia (including sickle cell disease), undergoing elective splenectomy, or a recipient of a hematopoietic stem cell transplant

2. Screen all patients for contraindications and precautions to Hib:
   **Contraindications:**
    - A history of a serious reaction (e.g., anaphylaxis) after a previous dose of Hib or to one of its components.
    - 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:**
    - Moderate or severe acute illness with or without fever
    - The vial stoppers for PedvaxHIB® and the DTaP-IPV and ActHIB vaccine components of Pentacel® contain natural rubber latex and may cause allergic reactions in latex sensitive individuals
    - 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

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:
   Routine Hib vaccination consists of a 3-dose (PedvaxHIB® at 2, 4 and 12-15 months

of age) or 4-dose series (ActHIB®, Hiberix®, Pentacel® at 2, 4, 6, and 12-15 months of age). Administer 0.5ml 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. Choose needle gauge and length appropriate to administration route and the patient's age and/or body mass according to the chart below

| **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** |
| Infants (1-12 months) | 1 inch | Anterolateral thigh |
| 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

| ***Routine Dosing*** | | | | |
|---|---|---|---|---|
| Dose number | Recommended age for this dose | Minimum age for this dose | Recommended interval to next dose | Minimum interval to next dose |
| 1 | 2 months | 6 weeks | 8 weeks | 4 weeks |
| 2 | 4 months | 10 weeks | 8 weeks | 4 weeks |
| 3† | 6 months | 14 weeks | 6-9 months | 8 weeks |
| 4 | 12-15 months | 12 months | | |

† ActHIB®, Hiberix®, Pentacel® only for dose # 3 at age 6 months

5. For persons who did not receive Hib at the ages/intervals specified in #4, give one dose at the earliest opportunity and then schedule subsequent doses according to the following:

| ***Catch-up Dosing (Immunocompetent)*** | | |
|---|---|---|
| Current Age | # of Prior Doses[1] | Schedule |
| < 1 year | 0 or unknown | Follow routine dosing schedule and intervals |
| 12-14 months | 0 or unknown | Give dose #1, followed by dose #2 (final) in ≥ 8 weeks |
| | 1 dose before 12 months of age | Give dose #2, followed by dose #3 (final) in ≥ 8 weeks |

| | | |
|---|---|---|
| | 2 doses, #1 before 12 months of age | Give dose #3 (final) at least 8 weeks after dose #2 |
| | 1 dose at ≥12 months of age | Give dose #2 (final) at least 8 weeks after dose #1 |
| | 2 doses, #1 at ≥12 months of age | No additional doses needed |
| | 3 doses before 12 months of age | Give dose #4 (final) at least 8 weeks after dose #3 (ActHib, Hiberix, or Pentacel series only) |
| 15 – 59 months | 1 dose before 12 months of age | Give dose #2 (final) |
| | 1 dose at 12-14 months of age | Give dose #2 (final) at least 8 weeks after dose #1 |
| | 1 dose at age ≥15 months | No additional doses needed |
| | 2 doses, #1 before 12 months of age and #2 before 15 months of age | Give dose #3 (final) at least 8 weeks after dose #2 |
| | 2 doses, #1 before 12 months of age and #2 after 15 months of age | No additional doses needed |
| | 2 doses, #1 at ≥12 months of age | No additional doses needed |
| | 3 doses before 12 months of age | Give dose #4 (final) at least 8 weeks after dose #3 (ActHib, Hiberix, or Pentacel only) |
| | 0 or unknown by ≥ 15 months of age | Give dose #1 (final) |

1. Previous doses must meet minimum age requirements and minimum intervals

***Catch-up Dosing (High-risk Conditions)***

| Medical Indication | Age and vaccination history | | |
|---|---|---|---|
| | 12–59 months with 0-1 dose before age 12 months | 12–59 months with ≥2 doses before age 12 months | ≥5 years of age and unvaccinated† |
| Functional or anatomic Asplenia; HIV infection | Give 2 doses, 8 weeks apart | Give 1 dose ≥ 8 weeks after previous dose | Give 1 dose |
| Immunoglobulin or early component complement deficiency; chemotherapy or radiation therapy§ | Give 2 doses, 8 weeks apart§ | Give 1 dose ≥8 weeks after previous dose§ | |
| Hematopoietic stem cell transplant | Give 3 doses (at least 4 weeks apart) beginning 6–12 months after transplant, regardless of Hib vaccination history | | |
| Elective splenectomy | For unvaccinated children age 15 months or older, give 1 dose, preferably at least 14 days before procedure | | |

†Persons who have not received a primary series and booster or at least 1 dose of Hib vaccine by ≥15 months of age are considered unvaccinated.

§Persons vaccinated within 14 days of starting immunosuppressive therapy should be revaccinated ≥3 months after completion of therapy.

***Note: Previously unvaccinated children age 60 months or older who are not considered high risk do not require catch-up vaccination***

6. 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.

7. 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.

8. 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.

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

_____ _____

Medical Director's Signature Date