Pharmacy Protocol

***Haemophilus influenzae* type b (Hib) Conjugate Vaccines (ActHIB®[1], PedvaxHIB®[3], HIBERIX®[2],)**	
Last Reviewed	30 November 2022
Last Revised	30 November 2022
This order expires	30 November 2024

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1. What's new

Reviewed for potential changes. No substantive changes.

2. Oregon immunization protocol

A. Check the ALERT Immunization Information System (IIS) to determine whether the patient needs this vaccine and any other vaccines.

B. Screen clients for contraindications and precautions.

C. Provide a current Vaccine Information Statement (VIS), answering any questions.

D. Record all required data elements in the client's permanent health record.

E. Verify needle length for intramuscular (IM) injection.

F. Administer a 0.5-mL dose of Hib-containing vaccine IM according to age and vaccine-specific schedule.

G. Hib-containing vaccines can be given with all other routinely recommended vaccines.

H. To avoid injury related to vaccine administration, make sure staff who administer vaccines recognize the anatomic landmarks and use proper IM administration technique.

I. Ask client to remain seated in the clinic for 15 minutes after vaccination to decrease the risk of injury should they faint.

I have read, understand, and agree to participate by the terms of this protocol.

Immunizing pharmacist Date

3. Vaccine schedule for *Haemophilus influenzae* type b vaccines

N/A

4. Licensed *Haemophilus influenzae* type b vaccines

Product Name	Vaccine Components	Presentation	Acceptable Age Range[4]	Thimerosal
ActHIB[1] (PRP-T)	Hib	0.5-mL single-dose vials	7 years and up*	None
HIBERIX[2] (PRP-T)	Hib		7 years and up*	
PedvaxHIB[3] (PRP-OMP)	Hib		7 years and up*	

*Not licensed by FDA for persons over 5 years of age, but recommended by ACIP for high-risk persons.

5. Recommendations for use

Routinely Recommended Use

N/A

Catch-Up for Healthy Children

N/A.

Catch-Up for Persons at High-Risk[4]

High-Risk Group	Vaccine Guidance
Patients aged ≥7 years undergoing elective splenectomy	If unimmunized, 1 dose prior to procedure.
Asplenic patients 7 years of age or older	If unimmunized, 1 dose.
HIV-infected children 7–18 years of age	If unimmunized, 1 dose.
HIV-infected persons ≥19 years of age	Hib immunization is not recommended.
Hematopoietic stem cell transplantation (HSCT)	3 doses beginning 6–12 months after HSCT regardless of prior Hib vaccine history

6. Contraindications

Severe allergic reaction to any component of the vaccine.

Vaccine	Contains[5]
Hib (ActHIB)	Sodium chloride, formaldehyde, sucrose
Hib (HIBERIX)	Formaldehyde, sodium chloride, lactose
Hib (PedvaxHIB)	Amorphous aluminum hydroxyphosphate sulfate, sodium chloride

7. Warnings and precautions

PedvaxHIB: the vial stopper contains dry, natural latex that may cause allergic reactions in sensitive patients.

8. Other considerations

The 4th dose in a 4-dose series and the 3rd dose in a 3-dose series are considered booster doses. Any licensed single-antigen Hib vaccine can be given for these doses, regardless of previous brand of Hib received.[6]

All monovalent Hib vaccines are interchangeable, but if brands are mixed or unknown, a 4-dose series is recommended.[6]

In immunosuppressed persons, including those receiving immunosuppressive therapy, the expected antibody responses may not be obtained.[1-5]

A. 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.[8]

B. Fever-reducing medications like acetaminophen, should not be used before or at the same time as vaccinations. They can be used for fever or discomfort that develops after vaccination. These medications have not shown to prevent febrile seizures in children with a history of febrile seizures.[8]

9. Side effects and adverse reactions

Hib, single-antigen (ActHib[1], HIBERIX[2], PedvaxHIB[3])	
Any local reaction—pain, redness, induration or swelling at injection site	Up to 49%
Severe pain, induration or swelling at injection site	Up to 4%
Any systemic reaction—Irritability, drowsiness, loss of appetite, fever.	Up to 70%
Severe (grade 3) systemic reactions—irritability, drowsiness	Up to 6%

10. Storage and handling

All clinics and pharmacies enrolled with the Vaccines for Children (VFC) Program must immediately report any storage and handling deviations to the Oregon Immunization Program at 971-673-4VFC (4823).

Vaccine	Temp	Storage Issues	Notes
All[1-3]	2°– 8°C	Protect from light. Do not freeze.	HIBERIX[2] – discard if the diluent has been frozen.

11. Adverse events reporting

Report suspected adverse events to the Vaccine Adverse Events Reporting System (VAERS) online at https://vaers.hhs.gov/reportevent.html. VAERS Reporting Table: https://vaers.hhs.gov/resources/infoproviders.html.

Event and interval from vaccination
A. Shoulder Injury Related to Vaccine Administration (7 days) B. Vasovagal syncope (7 days) C. Any acute complication or sequelae (including death) of above events (interval not applicable) D. Events described in manufacturer's package insert as contraindications to additional doses of vaccine (interval – see package insert).

12. References

1. ActHIB® package insert. March 2022. Available at www.fda.gov/media/74395/download. Accessed 9 November 2022.
2. HIBERIX® package insert. April 2018. Available at www.fda.gov/media/77017/download. Accessed 9 November 2022.
3. PedvaxHIB® package insert. No date. Available at www.fda.gov/media/80438/download. Accessed 9 November 2022.
4. Briere EC, Rubin L, Moro P, et al. Prevention and control of *Haemophilus influenzae* type b disease: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2014; 63(RR-1). Available at: www.cdc.gov/mmwr/PDF/rr/rr6301.pdf. Accessed 9 November 2022.
5. CDC. Vaccine Excipient Table. February 2021. Available at: www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf. Accessed 9 November 2022.
6. Ezeanolue E, Harriman K, Hunter P, Kroger A, Pellegrini C. General Best Practice Guidelines for Immunization. Best Practices Guidance of the Advisory Committee on Immunization Practices (ACIP). www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html. Accessed 9 November 2022.
7. Oliver SE, Moore KL. Licensure of a diphtheria and tetanus toxoids and acellular pertussis, inactivated poliovirus, *Haemophilus influenzae* type b conjugate, and hepatitis B vaccine, and guidance for use in infants. MMWR 2020; 69:136–9. Available at: www.cdc.gov/mmwr/volumes/69/wr/mm6905a5.htm?s_cid=mm6905a5_w. Accessed 9 November 2022.

To request this material in an alternative format (e.g., Braille) or to clarify any part of the above order, contact the Oregon Health Authority Immunization Program at 1-800-980-9431 and 711 for TTY. For other questions, consult with the vaccine recipient's primary health care provider or a consulting physician.

Electronic copy of this standing order is available at: pharmacy protocols