



## Haemophilus influenzae Type b (Hib)

### What is *Haemophilus influenzae* type b?

- A type of bacteria that causes infections. Infections caused by *Haemophilus influenzae* type b (Hib) can be prevented by the Hib vaccine, which is one of the routine childhood immunizations.
- These bacteria can infect ears, eyes, and sinuses and cause serious infections, such as epiglottitis (ie, infection of the flap that covers the windpipe) and infection of skin, lungs, blood, joints, and coverings of the brain (meningitis).
- Not to be confused with “the flu,” a disease caused by influenza, a virus.
- There are *H influenzae* types other than type b that are less dangerous. Those bacteria commonly cause ear and sinus infections.

### What are the signs or symptoms?

Depends on the site of infection. May include

- Fever
- Vomiting
- Irritability
- Stiff neck
- Rapid onset of difficulty breathing
- Cough
- Warm, red, swollen joints
- Swelling and discoloration of the skin, particularly of the cheek and around the eye

### What are the incubation and contagious periods?

- Incubation period: Unknown
- Contagious period: Until antibiotic treatment has begun

### How is it spread?

- Respiratory (droplet) route: Contact with large droplets that form when a child talks, coughs, or sneezes. These droplets can land on or be rubbed into the eyes, nose, or mouth. The droplets do not stay in the air; they usually travel no more than 3 feet and fall onto the ground.
- Contact with the respiratory secretions from or objects contaminated by children who carry these bacteria.



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A classic presentation of *Haemophilus influenzae* type b (Hib) facial cellulitis in a 10-month-old. This once-common infection has been nearly eliminated among children who have been immunized with the Hib vaccine.

### How do you control it?

- *Haemophilus influenzae* type b infection is a vaccine-preventable disease. Children should receive the vaccine according to the most recent immunization recommendations.
- Preventive antibiotics (chemoprophylaxis) for exposed children and staff may be considered on the advice of the local health department if a child is seriously ill with meningitis or blood infection due to Hib. For this reason, alerting the local health department if a child has been diagnosed with Hib is very important. This is not commonly needed now that Hib immunization is widespread. Immunized people are protected if they encounter a sick individual with a Hib infection.

### What are the roles of the educator and the family?

- Report the infection to the staff member designated by the early childhood education (ECE) program or school for decision-making and action related to care of ill children. That person, in turn, alerts possibly exposed family and staff members and the parents of unimmunized or incompletely immunized children to watch for symptoms. The designated staff person also notifies the Child Care Health Consultant.

- Report the infection to the local health department. If the health professional who makes the diagnosis does not inform the local health department that the infected child is a participant in an ECE program or school, this could lead to a delay in controlling the spread.
- Household members and children (especially those younger than 4 years) who are under-immunized or unimmunized and attending an ECE setting where 2 or more cases of Hib infection occur within 60 days may need to take an antibiotic to prevent the spread of this disease and should be offered the vaccine. Do not exclude children and staff members who have been exposed as long as they have no other reasons for exclusion.
- Ensure exposed children who develop a fever are seen by a pediatric health professional as soon as possible.
- Use good hand-hygiene technique at all the times listed in Chapter 2.
- Clean and sanitize surface areas and items that are contaminated by children's respiratory (nasal and cough) secretions.

## Exclude from educational setting?

### Yes.

Exclude all children with a diagnosis of Hib infection.

## Readmit to educational setting?

### Yes, when all the following criteria are met:

- After the child has been cleared by a pediatric health professional
- When the child is able to participate and staff members determine they can care for the child without compromising their ability to care for the health and safety of the other children in the group

