

INFECTION PREVENTION AND CONTROL MEASURES IN HEALTH CARE SETTINGS:

In addition to standard precautions, in patients with invasive *H influenzae* type b disease, droplet precautions are recommended through 24 hours after initiation of effective antimicrobial therapy.

CONTROL MEASURES (FOR INVASIVE H INFLUENZAE TYPE B DISEASE):

Care of Exposed People. Secondary cases of *H influenzae* type b disease have occurred in unimmunized or incompletely immunized children exposed to invasive disease in a child care or household setting. Such children should be observed carefully for fever or other signs/symptoms of disease. Exposed young children in whom febrile illness develops should receive prompt medical evaluation.

Chemoprophylaxis.¹ The risk of invasive *H influenzae* type b disease is increased among unimmunized household contacts younger than 4 years. Rifampin eradicates *H influenzae* type b from the pharynx in approximately 95% of carriers and decreases the risk of secondary invasive illness in exposed household contacts. Child care center contacts also may be at increased risk of secondary disease when unimmunized or incompletely immunized children are attending, but secondary disease in child care contacts is rare when all contacts are older than 2 years. Indications and guidelines for chemoprophylaxis in different circumstances are summarized in Table 3.10.

- **Household.** See Table 3.10 for details regarding prophylaxis for household members of a person with invasive *H influenzae* type b disease, when at least 1 household member fits the listed criteria. Given that most secondary cases in households occur during the first week after hospitalization of the index case, prophylaxis should be initiated as soon as possible when it is indicated. Because some secondary cases occur later, initiation of prophylaxis 7 days or more after hospitalization of the index patient still may be of some benefit.
- **Child care and preschool.** When 2 or more cases of invasive *H influenzae* type b disease have occurred within 60 days and unimmunized or incompletely immunized children attend the child care facility or preschool, rifampin prophylaxis for all attendees (irrespective of their age and vaccine status) and child care providers should be considered. In addition to these recommendations for chemoprophylaxis, unimmunized or incompletely immunized children should receive a dose of Hib vaccine and should be scheduled for completion of the recommended age-specific immunization schedule (<https://publications.aap.org/redbook/pages/Immunization-Schedules>). Data are insufficient on the risk of secondary transmission to recommend chemoprophylaxis for child care attendees and providers when a single case of invasive *H influenzae* type b disease occurs; the decision to provide chemoprophylaxis in this situation is at the discretion of the local or state health department.
- **Index case.** See Table 3.10.
- **Dosage.** For prophylaxis, rifampin should be administered orally, once a day for 4 days (20 mg/kg; maximum dose, 600 mg). The dose for infants younger than 1 month is not established; some experts recommend lowering the dose to 10 mg/kg. For adults, each dose is 600 mg. If rifampin is contraindicated, administering a

¹Centers for Disease Control and Prevention. Prevention and control of *Haemophilus influenzae* type b disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Recomm Rep*. 2014;63(RR-1):1-14

Table 3.10. Indications and Guidelines for Rifampin Chemoprophylaxis for Contacts of Index Cases of Invasive *Haemophilus influenzae* Type b Disease^a

Chemoprophylaxis Recommended

- For all household contacts^b in the following circumstances:
 - ♦ Household with at least 1 child younger than 4 years who is unimmunized or incompletely immunized^c
 - ♦ Household with a child younger than 12 months who has not completed the primary *H influenzae* type b (Hib) vaccine series
 - ♦ Household with an immunocompromised child, regardless of that child's Hib immunization status or age
- For preschool and child care center contacts when 2 or more cases of *H influenzae* type b invasive disease have occurred within 60 days and unimmunized or incompletely immunized children attend the child care facility or preschool (see text)
- For index patient, if younger than 2 years or member of a household with a susceptible contact and treated with a regimen other than cefotaxime or ceftriaxone, chemoprophylaxis at the end of therapy for invasive infection

Chemoprophylaxis Not Recommended

- For occupants of households with no children younger than 4 years other than the index patient
- For occupants of households when all household contacts are immunocompetent, all household contacts 12 through 48 months of age have completed their Hib immunization series, and when household contacts younger than 12 months have completed their primary series of Hib immunizations
- For preschool and child care contacts of 1 index case
- For index patients over age 2 years or treated with a full course of cefotaxime or ceftriaxone for *H influenzae* type b invasive disease
- For pregnant people

^aSimilar criteria may be used for *H influenzae* type a; however, the criteria for Hib immunization are not applicable.

^bDefined as people residing with the index patient or nonresidents who spent 4 or more hours with the index patient for at least 5 of the 7 days preceding the day of hospital admission of the index case.

^cComplete immunization is defined as having had at least 1 dose of Hib conjugate vaccine at 15 months of age or older; 2 doses between 12 and 14 months of age; or the 2- or 3-dose primary series when younger than 12 months with a booster dose at 12 months of age or older.

single dose of ceftriaxone can be considered, although the durability of eradication using this approach has not been well established.

- **Invasive *H influenzae* type a disease.** Clinicians can consider chemoprophylaxis of household contacts of index cases of invasive *H influenzae* type a disease in those households with a child younger than 4 years or with an immunocompromised child. For these individuals and contacts, chemoprophylaxis recommendations for *H influenzae* type b listed in Table 3.10 may be followed; however, because there is not a licensed vaccine for *H influenzae* type a, the criteria regarding vaccination do not apply. A similar approach as *H influenzae* type b disease also may be considered for