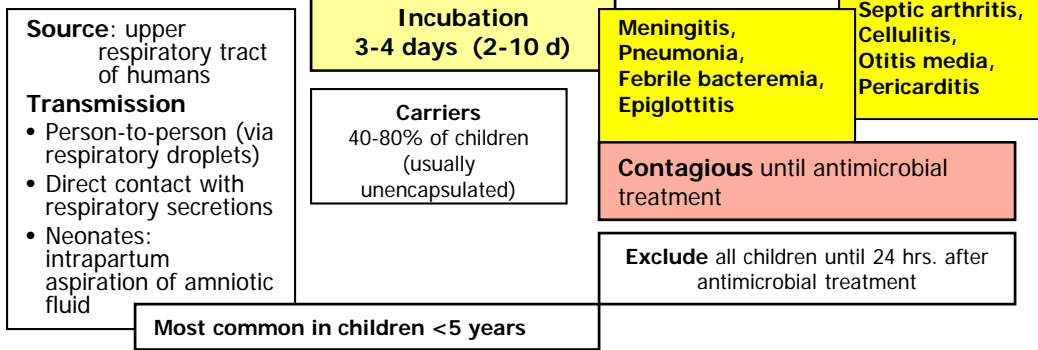


# Haemophilus influenzae Invasive (Meningitis)

## Transmission, Exclusion



## Diagnosis

- Pleomorphic gram-negative coccobacillus
- 6 typable (capsulated) strains (a-f), + unencapsulated strains.
- Type b is most common cause

### Lab Diagnosis

- **Culture:** primary diagnosis criterion
  - positive for *H. influenzae* in CSF, blood, synovial fluid, pleural fluid, or middle ear aspirates on chocolate agar
- **Serotype:** differentiate between unencapsulated and encapsulated strains. Identify type (a-f).
- **Antigen Detection:** Latex agg. On Urine/serum
  - False positive (recently vaccinated, fecal contamination)
  - False negative: Do not exclude if negative latex

### Clinical Case Definition

- Children <5 yrs.
  - Sudden onset
  - Vomiting
  - Lethargy
  - Bulging fontanelle- infants
  - Stiff neck/back
- Probable:** Clinically compatible case with detection of Hib antigen in CSF
- Confirmed:** Clinically compatible case that is laboratory confirmed

Send culture to State Lab

## Treatment, Prophylaxis

### Treatment

- Cefotaxime or ceftriaxone
- Meropenem or combination of ampicillin and chloramphenicol
- Antimicrobial therapy for 10 days (or more) intravenously
- Dexamethazone in infants to decrease risk of neurologic sequelae- given before/concurrent with first antimicrobial dose

### Prophylaxis

- **Rifampin** –eradicates Hib from pharynx in 95% of carriers, decreases risk of secondary illness
- Dose: orally once a day for 4 days (20 mg/kg; maximum dose 600 mg)

### Indications for Prophylaxis in Households

**In households with at least 1 contact younger than 48 months of age who is unimmunized or incompletely immunized against Hib, or 1 contact younger than 12 months who has not completed the primary Hib immunization series**

→ Rifampin prophylaxis is recommended for all household contacts, irrespective of age.

Exception: All members of households with a fully immunized but **immunocompromised** child, regardless of age, → rifampin because of concern for ineffective immunization series

### Indications for Prophylaxis in Daycare Centers

**1-When 2 or more cases of invasive disease have occurred within 60 days and Un-immunized or incompletely immunized children attend the child care facility,**

→ Rifampin prophylaxis to all attendees and supervisory personnel is indicated.

2-Single case in daycare with unimmunized or incompletely immunized children: many experts recommend no prophylaxis.

3-Unimmunized or incompletely immunized children should complete recommended age-specific immunization schedule

## Control

### Droplet precautions

**Immunization** of all children : Dose at 2, 4, 6 mos. with booster at 12-15 mos.

**Close contacts + prophylaxis:** see above