



Philadelphia Department of Public Health  
**Division of Disease Control**

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**Health Advisory**  
**Fatal Case of Meningitis due to**  
***Haemophilus influenzae* type b in Philadelphia**  
**March 13, 2009**

On March 11, 2009, the Philadelphia Department of Public Health, Division of Disease Control received a report of a fatal case of meningitis due to *Haemophilus influenzae* type b in an unvaccinated 4-year-old child. The child's family belongs to a religious community that eschews medical care, including vaccines. The child was ill with a severe febrile illness for one week, and died at home without receiving medical attention. An autopsy completed by the Philadelphia Medical Examiner on March 11, 2009 demonstrated findings consistent with bacterial meningitis. Gram-negative coccobacilli were visualized on spinal fluid gram stain; cultures are growing *Haemophilus influenzae* type b (Hib).

The Philadelphia Department of Public Health (PDPH) is providing vaccine and chemoprophylaxis to household contacts and siblings, as age-appropriate. At present, the parents are allowing the children to comply. In addition, on January 24, 2009, a 2-year-old unvaccinated child from this same community died of pneumonia. Cultures of lung tissue obtained at autopsy grew *S. aureus* and *H. influenzae*, not typed.

Invasive Hib can cause meningitis, sepsis, pneumonia, and epiglottitis, especially among very young children. This serious disease has been uncommon since routine use of Hib vaccine began over 15 years ago. In Pennsylvania, there have been at least 5 other confirmed pediatric cases of invasive Hib infection since late 2008, including a second fatal case in 2009. All of these cases occurred in un/under-vaccinated children. Another pediatric cluster of invasive Hib infections occurred among underimmunized children in Minnesota in 2008.

This resurgence of invasive Hib disease has occurred during a nationwide Hib vaccine shortage that began in December 2007. **Infants should continue to receive the primary Hib vaccine series on schedule.** Healthy children who have completed the primary series do not appear to be at additional risk of invasive Hib as a result of this resurgence. The booster dose normally received at age 12-15 months of age, *except* for children at high risk (such as children with sickle-cell disease, leukemia, HIV and other immune system problems, or asplenia) must continue to be deferred until Hib vaccine supplies are adequate. This helps assure that there is sufficient vaccine for all children to receive the primary series.

**Recommendations:**

- Providers should track and recall infants who have not completed the primary Hib vaccine series.
- Clinicians should have heightened awareness for Hib disease, and be prepared to promptly recognize and treat the infection.
- Confirmed and suspect cases of Hib should be immediately reported to the Division of Disease Control, PDPH, at 215-685-6748.
- All invasive isolates of *Haemophilus influenzae* should be submitted to the Philadelphia Public Health Laboratory for serotyping.