# Hib (Haemophilus influenzae type b) Vaccine

# <u>Benefits</u>

**Protects against infections caused by Hib**, including pneumonia (lung infection), epiglottitis (serious throat infection which can block the windpipe), and meningitis (infection of the covering of the brain and spinal cord).

**Prevents long-term effects of serious Hib infection**, like hearing loss and brain damage.

**Keeps others safe**: some people cannot get vaccines due to allergies or other issues.



**Saves lives**: 1 in 20 children with a serious Hib infection die, even with treatment. The vaccine has cut the number of Hib infections from 20,000 per year to about 100 per year.

# Side effects

1 in 5 kids will have mild side effects such as redness, warmth, or swelling where the shot was given. 1 in 20 will have a fever lasting 2-3 days after getting the vaccine. 1 in a million may have an allergic reaction to the vaccine.

## **Concerns**

## Can Hib vaccine cause Hib disease?

No, the vaccine only contains a dead part of the Hib bacteria. This helps the body recognize and fight Hib in the future, but it cannot cause infection.

## If Hib is no longer common in the United States, why does my child need the shot?

Though there are fewer cases than there used to be, some unvaccinated children still get sick from Hib every year. Also, some people cannot receive vaccines due to severe allergies. By getting the vaccine, you help others by reducing the risk of passing along a potentially fatal illness.

## Does the Hib vaccine contain aluminum, formaldehyde, mercury, or thimerosal?

The Hib vaccine does contain a small amount (less than one quarter of a milligram) of aluminum, about as much as a week's worth of breastmilk or a day's worth of formula. The vaccine contains 0.0004 mg of formaldehyde, which is a naturally occurring substance. An infant has 2500 times this amount of formaldehyde circulating in his or her bloodstream naturally. The Hib vaccine does not contain mercury or thimerosal.

#### Where does the Hib vaccine come from?

The Hib vaccine is made from deactivated forms of the Hib bacteria, which is grown in a laboratory and then killed so as to be safe for use in the vaccine. The Hib vaccine can be administered through the Pentacel vaccine, which is made using a line of fetal stem cells.

#### Do any of the sources used in this handout have ties to pharmaceutical companies?

The sources used for this handout are the Center for Disease Control (CDC), the NIH, and the Children's Hospital of Philadelphia (CHoP). While some employees at the CDC, NIH, and CHoP have ties to pharmaceutical companies, both of those organizations are up-front about these connections. The CDC in particular took steps in 2006 to make its vaccine recommendation unit more independent and less subject to bias.

#### References:

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5803a4.htm http://www.nlm.nih.gov/medlineplus/ency/article/002023.htm http://www.chop.edu/service/vaccine-education-center/vaccine-safety/vaccine-ingredients/formaldehyde.html http://www.chop.edu/service/vaccine-education-center/vaccine-safety/vaccine-ingredients/aluminum.html http://www.chop.edu/service/vaccine-education-center/vaccine-safety/vaccine-ingredients/thimerosal.html

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