

Hepatitis B Vaccine

Benefits

Protects against infection by Hepatitis B, which can lead to jaundice, fever, liver failure, cirrhosis, liver cancer, and death.

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

Side effects

1 in 4 children will have mild side effects such as redness, warmth, or swelling where the shot was given. 1 in 15 will have a fever lasting 2-3 days after getting the vaccine. Fewer than 1 in a million may have an allergic reaction to the vaccine.

Concerns

Can the Hepatitis B vaccine cause Hepatitis?

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

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

Though there are fewer cases of Hepatitis B than there used to be, there are still about 20,000 cases per year in the United States, which kill about 3,000 people every year.

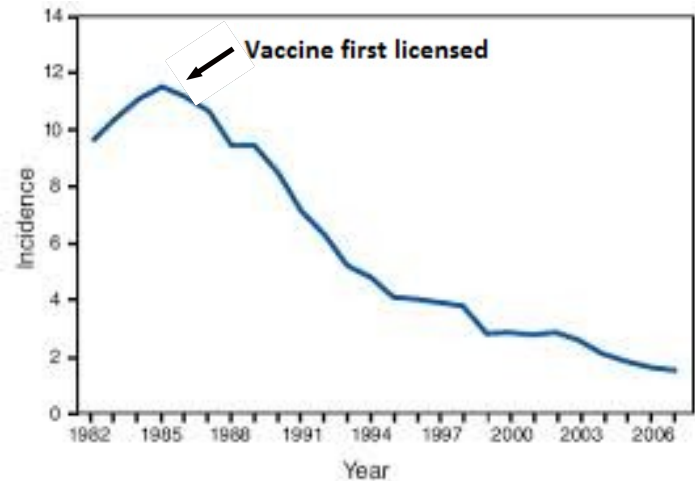
Isn't Hepatitis B sexually transmitted? Can't my child wait until s/he is older to get this shot?

While Hepatitis B can be sexually transmitted, it can also be spread through prolonged non-sexual contact with an infected person like a family member or classmate. Hepatitis B is more dangerous in children, since the risk of developing chronic liver infection after exposure to the virus is much higher in children than in adults (40% vs. 5%). For this reason, the recommendation is to get the Hepatitis B vaccine as early as possible.

Does the Hepatitis B vaccine contain aluminum, formaldehyde, mercury, or thimerosal?

The Hepatitis B vaccine contains a small amount (less than 0.25 mg) of aluminum, which is as much as a week's worth of breastmilk or a day's worth of formula. The vaccine contains less than 0.1 mg of formaldehyde, which is a

Incidence of Hepatitis B in the US



naturally occurring substance, and is not harmful at that level. An infant has 10x this amount of formaldehyde circulating in his or her bloodstream naturally. The Hepatitis B vaccine does not contain mercury or thimerosal.

Where does the Hepatitis B vaccine come from?

The Hepatitis B vaccine is produced in yeast cells, which are used to replicate the Hepatitis virus. The virus is then killed, making it safe for use in vaccines.

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 WHO, and the Children's Hospital of Philadelphia (CHoP). While some employees at the CDC, WHO, 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/vaccines/vac-gen/side-effects.htm#hepb>

<http://www.cdc.gov/hepatitis/statistics/2010surveillance/Commentary.htm>

<http://www.cdc.gov/hepatitis/Statistics/2011Surveillance/Commentary.htm#hepB>

<http://www.who.int/mediacentre/factsheets/fs204/en/>

<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/formaldehyde.html>

<http://www.chop.edu/service/vaccine-education-center/vaccine-safety/vaccine-ingredients/thimerosal.html>

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