



North Carolina Department of Health and Human Services  
Division of Public Health – Women’s & Children’s Health Section

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June 29, 2009

**MEMORANDUM**

**TO:** Universal Childhood Vaccine Distribution Program (UCVDP) Providers

**FROM:** Beth Rowe-West, R.N., B.S.N., Head,  
Immunization Branch

**SUBJECT:** Reinstatement of *Haemophilus influenzae* type b (Hib) Booster

The purpose of this memo is to notify providers of the Centers for Disease Control and Prevention’s (CDC) recent reinstatement of the recommendation for a booster dose of *Haemophilus influenzae* type b (Hib) vaccine. On December 13, 2007, certain lots of *Haemophilus influenzae* type b (Hib) vaccine marketed as PedvaxHIB (monovalent Hib vaccine) and Comvax (Hib-HepB vaccine), manufactured by Merck & Co., Inc., were recalled voluntarily, and the company temporarily suspended production of these vaccines. In order to conserve the limited supply of Hib-containing vaccines, CDC recommended that vaccination providers temporarily defer the routine Hib vaccine booster dose administered to most healthy children at age 12 through 15 months of age.

Production of Merck’s Hib vaccine products is still suspended. However, two other Hib-containing vaccines manufactured by Sanofi Pasteur have been available for use in the United States during this shortage: monovalent Hib vaccine (ActHIB) and DTaP-IPV/Hib (Pentacel). Beginning in July 2009, the manufacturer of these two vaccines will increase the number of doses of these two products available for use in the United States, which will result in the supply being sufficient to reinstate the Hib vaccine booster dose.

**Reinstatement of Hib Booster Dose**

Effective immediately, CDC is recommending reinstatement of the booster dose of Hib vaccine for children aged 12 through 15 months who have completed the primary 3-dose series. Infants should continue to receive the primary Hib vaccine series at ages 2, 4, and 6 months. Children aged 12 through 15 months should receive the booster dose on time. Older children for whom the booster dose was deferred should receive their Hib booster dose at the next routinely scheduled visit or medical encounter. **Although supply is sufficient to reinstate the booster dose and begin catch-up vaccination, supply is not yet ample enough to support a mass notification process to contact all children with deferred Hib booster doses.** All UCVDP providers should use state-supplied vaccines in following these recommendations.

As part of delivering the booster dose to those children for whom it was deferred at the next routinely scheduled appointment or medical encounter, providers should discuss with parents the reasons for the change in recommendation and might consider 1) reviewing electronic or paper medical records or immunization information system records to identify children in need of a booster dose before physician encounters, 2) evaluating children’s vaccination status during their scheduled visit, and 3) sharing immunization schedules with parents to make them aware of this plan.

**Use of Combination Vaccines**

During the Hib shortage, children received protection from certain vaccine preventable diseases in their primary vaccination series through various permutations of available combination vaccines (e.g., DTaP-IPV/Hib [Pentacel] and DTaP-IPV-HepB [Pediarix]) and monovalent vaccines (e.g., ActHib, HepB, and IPV). Therefore, a mismatch might exist between patient vaccination needs and the available stock of different vaccine formulations (e.g., combination products versus single-antigen vaccines) in local provider offices. This situation presents a challenge for providers to administer vaccines to ensure appropriate coverage while minimizing extra doses of unneeded vaccine. For example, if a provider is using DTaP-IPV/Hib (Pentacel) vaccine to protect infants against Hib disease, the provider should ensure that adequate stock of monovalent HepB vaccine is available to complete the HepB vaccine series. Children

who need the Hib booster and who already have received 4 doses of DTaP should receive monovalent Hib vaccine (ActHIB) as their Hib booster dose. However, if DTaP-IPV/Hib is the only Hib-containing vaccine available, this combination product can be used to complete the series of Hib vaccination, even if the child already has received all the necessary doses of DTaP and IPV.

### **UCVDP Supplies and Ordering**

Although supplies are adequate to reinstate the booster dose, they are still limited as Hib product continues to be allocated by CDC. Hib orders will still take approximately one extra week to process. We are requesting providers to continue ordering Hib/Pentacel based on the past 3 month's usage, and the Immunization Branch will increase orders by approximately 10-20% as supplies allow.

This is a good time for providers who may have discontinued the use of a particular vaccine (such as Pediarix) to review unused supplies of vaccines that may be on site, and begin using these supplies as appropriate to avoid wasting vaccine due to upcoming expiration dates.

### **Additional Information Regarding Hib Vaccines**

This recommendation reflects CDC's assessment of the existing national Hib vaccine supply and will be updated if the supply changes. Updated information about the national Hib vaccine supply is available at <http://www.cdc.gov/vaccines/vac-gen/shortages/default.htm>.

Details about the routine Hib schedule are available at <http://www.cdc.gov/vaccines/recs/schedules/default.htm#child>. Adverse events following receipt of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS) at <http://vaers.hhs.gov>.

For additional information about UCVDP coverage criteria, go to: [www.immunizenc.com](http://www.immunizenc.com).

Please see the attached CDC question and answer document for providers regarding the Hib booster.

For more information about the Hib supply, recommendations, and ordering UCVDP Hib vaccines, contact the Immunization Branch Help Desk at 1-877-873-6247.

Cc: SMT NC Immunization Branch Steve Shore Greg Griggs Maclyn Powell  
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## Hib Return to Booster Q & A – for Providers

- 1. Is there any guidance about completing the HepB vaccine series in settings where Pentacel (DTaP-IPV-Hib) is being used for the Hib series?**

Providers who are using Pentacel for the Hib series should use monovalent HepB vaccine to complete the HepB vaccine series. This will minimize extra-immunization. Providers will need to plan ahead to ensure they have adequate doses of HepB vaccine on hand. For more guidance about completing the HepB vaccine series, taking into account the mother's hepatitis B surface antigen status (HBsAg) and vaccine availability, please refer to <http://www.cdc.gov/vaccines/vac-gen/shortages/downloads/eo-hib-hepb-cov.pdf>.

- 2. What are the different Hib vaccine products currently available and for what ages are they recommended for use?**

Hib vaccines products that are available include sanofi's monovalent Hib vaccine (ActHib) and the combination product DTaP-IPV/Hib (Pentacel). These two products are recommended for ages 2 months, 4 months, 6 months, and 12-15 months.

Note that for providers who serve predominantly American Indian/Alaska Native (AI/AN) children living in AI/AN communities, the Merck monovalent Hib vaccine, PedvaxHib, has been available through the states' immunization programs from the VFC Pediatric Vaccine Stockpile. These providers should continue to stock and use PRP-OMP – containing Hib vaccines (PedvaxHib and Comvax) and vaccinate according to the routinely recommended schedule.

- 3. Can the Hib “booster” dose refer to either the third or the fourth dose of Hib-containing vaccine?**

Yes. If for a given child a provider has used a sanofi product (either monovalent ActHib or combination vaccine Pentacel) for any of the doses in the series at the recommended ages, a total of 4 doses is needed (3 primary doses in the first year of life and 1 booster dose in the second year of life). If for a given child the provider has restricted use to Merck's monovalent Hib product (PedvaxHib) or the combination product HepB-Hib (Comvax) for age appropriate doses, the total number of doses in this series is three (2 primary doses and 1 booster dose). If a child has fallen behind in the series of Hib vaccine, fewer doses are required to complete the series regardless of the previous brand used. See Table 1 catch up at: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5751a5.htm?s\\_cid=mm5751a5\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5751a5.htm?s_cid=mm5751a5_e)

- 4. What is the current recommendation for children at increased risk for Hib disease, and has this recommendation changed?**

There has been no change in the recommendation for children at increased risk for Hib disease. Throughout the shortage—during which deferral of the booster dose was recommended for most children, those children at increased risk for Hib disease have specifically been recommended to continue to receive the complete series of Hib vaccine (including the primary series and booster). Children at increased risk for Hib disease include those with asplenia, sickle cell disease, and human immunodeficiency virus infection and certain other immunodeficiency syndromes, and malignant neoplasms. In addition, some groups at particular risk of invasive Hib disease (i.e., American Indians/Alaska Natives) have been recommended to receive remaining doses of Merck's Hib vaccine, which is available from the VFC Pediatric Vaccine Stockpile. This recommendation has not changed.

- 5. Is it anticipated that supplies of Hib-containing vaccine will be sufficient in the near future to allow for active recall of children for whom the booster dose was deferred?**

CDC does not recommend active recall for children for whom the booster dose was deferred until supplies of Hib vaccine improve. CDC recommends that children older than age 15 months for whom the booster dose was deferred receive the booster dose when they are next seen in the office for a routinely scheduled or sick visit. If additional Hib-containing vaccine becomes available to support active recall, CDC will communicate this information broadly with partners and providers.

- 6. If a Hib-containing combination vaccine is the only product available to a practice to bring a child up-to-date for Hib, but the child is already up-to-date for the other vaccines in the combination, is it safe to administer the combination vaccine?**

Providers should plan ahead so that adequate supplies of the appropriate products are available at the time of the child's visit and that extra-immunization is minimized. However, if Pentacel (that is, the sanofi combination product DTaP-IPV/Hib) is the only Hib-containing vaccine available, this product should be used to complete the Hib vaccination series, even if the child has already received all the necessary doses of DTaP and IPV. Studies suggest that extra DTaP can lead to an increase in local reactogenicity (e.g., sore arm).

