


How to Reconstitute and Administer Lyophilized DTP + Hib + Hepatitis B (Pentavalent) Vaccine

IMPORTANT FACTS TO CONSIDER	
<p>Lyophilized Hib + DTP + Hepatitis B vaccine comes in two separate vials:</p> <ul style="list-style-type: none"> ➤ One vial contains <u>liquid DTP + Hepatitis B vaccine</u> (used as a diluent) ➤ The second vial contains a <u>lyophilized (freeze-dried) Hib vaccine</u> 	<ul style="list-style-type: none"> • Only use the DTP-Hep B vaccine supplied with the lyophilized Hib vaccine • Never use water or any other diluent to reconstitute the pentavalent vaccine • Remember that the diluent <u>IS</u> the DTP-Hep B component of the vaccine

RECONSTITUTING	ADMINISTERING
<ul style="list-style-type: none"> • Make sure you have both vials and 2 ml mixing (reconstitution) syringes • Check the expiry date of the DTP + hepatitis B vaccine: <ul style="list-style-type: none"> ➤ Discard vaccine that is too old or has been exposed to too much heat • Use the shake test to determine if the DTP + hepatitis B vaccine has been frozen: <ul style="list-style-type: none"> ➤ Do not use DTP + hepatitis B vaccine that has been frozen, or that you suspect has been frozen. • Using the mixing syringe, draw up all of the DTP + hepatitis B vaccine (used as diluent). Inject it into the vial containing the lyophilized Hib vaccine. • Remove the mixing syringe from the vaccine vial and shake the vial, or roll it between your palms, until the powder is fully dissolved and there are no visible particles in the vial <div style="border: 1px solid black; padding: 5px; margin-top: 10px; text-align: center;"> <p>IMPORTANT: Discard any reconstituted Pentavalent vaccine after six hours, or at the end of each session, whichever comes first</p> </div>	<ul style="list-style-type: none"> • Use a 0.5 ml syringe and needle (disposable or auto-disable), the same type of syringe and needle as are routinely used for DTP injections • Draw 0.5 ml of reconstituted (mixed) vaccine into the injection syringe • Administer as an intramuscular injection (IM) in the infant's outer mid-thigh*: <div style="text-align: center; margin: 10px 0;">  <p style="text-align: right; margin-right: 20px;">Injection Site Area</p> </div> <p>* NEVER give intramuscular injections in the buttock of infants as there is risk of damaging nerves in that area. Also, it will result in a reduction in immunogenicity, especially for the Hep B component of the vaccine.</p> <p>NOTE: A sterile syringe and needle must be used for each injection and discarded in a safety box. The syringe and needle used for reconstitution should not be used for giving the injection</p>

REMEMBER THE FOLLOWING PRECAUTIONS	
<p>To facilitate the adequate reconstitution of the pentavalent vaccine, always:</p> <ul style="list-style-type: none"> ➤ Log the vaccines AND diluents in the stock inventory books ➤ Avoid keeping the lyophilized Hib vaccine and the DTP-Hep B vaccine (used as diluent) separated 	<p>During supervisory visits, supervisors must ensure the proper reconstitution and administration of the pentavalent vaccine by:</p> <ul style="list-style-type: none"> ➤ Observing the reconstitution and injection process ➤ Ensuring the availability of the same number of lyophilized Hib and DTP-Hep B vials

Source: PATH (Program for Appropriate Technology in Health). Immunizing children against *Haemophilus influenzae* type b (Hib). A training module for vaccinators. Available at http://www.childreenvaccine.org/html/ip_clinical.htm#training