

Dear Parent(s):

This letter is enclosed in your referral package because the child who is being referred to you is positive for Hepatitis B Surface Antibody (anti-HBs - this may also be recorded as HBsAb). This is a common finding amongst babies born in China. However it is not cause for concern as there are no adverse health consequences arising from this. You and your doctor may find the following information helpful in interpreting the baby's results:

Positive Anti-HBs with negative HBsAg (Hepatitis B Surface Antigen) can mean any of the following:

1) the baby was immunized against Hepatitis B (this is becoming increasingly common amongst orphanages in China). If the baby was immunized against Hepatitis B in China, you need to be sure she has had all 3 shots. Once in China, you will receive an immunization record from the orphanage and your guide can translate this for you. The first 2 Hepatitis B shots must be given 1 month apart and the 3rd shot is given 5 months after the second. Even if the records indicate the baby was immunized against Hepatitis B, it is recommended that you check the anti-HBc (core Antibody) once you return to Canada as you can never be guaranteed that the immunizations were given as recorded (which is why it is recommended that all immunizations be repeated). If the anti-HBc is negative, this is consistent with Hepatitis B immunization rather than previous Hepatitis B infection (scenario #2). It is then recommended that the baby receive the 3rd Hepatitis B shot assuming this hasn't been done. In addition, it is critical that the Anti-HBs be checked after 18 months of age to be sure the course of immunization has been effective and your baby has long-term protection against Hepatitis B. We are aware of a number of babies who reportedly had partial or complete Hepatitis B immunization in China but had no evidence of this after 18 months of age indicating that the immunization given was not effective.

OR

2) the baby was infected with Hepatitis B (either from the birth mother or as a result of infected needles) and the baby has cleared the infection by developing antibodies, becoming HBsAg negative. If the baby has developed antibodies, it is extremely rare for the baby to have any long-term complications because she has effectively cleared the infection. The anti-HBc (core antibody) test can differentiate between immunization and previous infection (ie scenario #1 and #2). If the baby was infected with Hepatitis B, then the anti-HBc will be positive; in contrast, if the baby was immunized against Hepatitis B, then the anti-HBc will be negative.

OR

3) the birth mother was anti-HBs positive and the baby still has the maternal antibodies. These can remain positive until 12-18 months of age. The birth mother would be anti-HBs positive if she herself had been immunized against Hepatitis B or if she had previously been infected with Hepatitis B and had cleared the infection (has antibodies in the form of anti-HBs). In this case, all other Hepatitis B results in the baby will be negative. If the baby has antibodies and one wants to verify that it is not merely passive transfer from the biologic mother, one should repeat this at 18 months. If the antibodies are still present and anti-HBc is negative, the baby has been immunized. If the antibodies are no longer present, then one can assume it was

passive transfer and the baby should receive Hepatitis B immunization.

Active Hepatitis B infection can be diagnosed 4-12 weeks after infection and is characterized by positive HBsAG (Hepatitis B surface antigen), positive anti-core antibodies, and *the absence of the surface antibody (anti-HBs)*. The baby is only capable of transmitting disease (ie is contagious) via blood if they have the antigen (HBsAG). However, active Hepatitis B infection is rare in babies adopted from China because the CCAA will not knowingly refer a baby who has active Hepatitis B infection, unless the parents have requested this. Having said this, it is very important to repeat all Hepatitis B tests upon return home and 6 months later to rule out the remote possibility that your child acquired Hepatitis B just prior to or following the tests that were done in China.

In summary, the most likely reason for your child's positive anti-HBs result is that she/he has begun to receive the immunization against Hepatitis B. The immunization record you will receive while in China as well as confirmatory tests upon arrival home in Canada will be able to differentiate this from the other possible scenarios. In any case, this result does not mean that your child has Hepatitis B. In fact, she is likely immune and neither at risk of communicating nor getting this disease. We realize that any abnormal test can be alarming to parents. We hope this letter will reassure you that this particular result is not concerning.

This letter was written by Dr. Margaret Lawson and is sent by The Children's Bridge office to prospective parents when the referral medical indicates the baby is positive for anti-HBs. Dr. Lawson is the volunteer medical consultant for The Children's Bridge and a pediatrician at the Children's Hospital of Eastern Ontario (CHEO) in Ottawa, specializing in pediatric endocrinology (hormone problems of children). In writing this letter, Dr. Lawson obtained assistance from the infectious disease department at CHEO.

For further information, you may want to read the article on Hepatitis B published in the March 2002 Children's Bridge newsletter. You may also contact The Children's Bridge office if you have further concerns or questions about the interpretation of your baby's results.

This letter was prepared by Dr. Margaret Lawson, volunteer medical consultant for The Children's Bridge, to be sent to Children's Bridge families when their referral medical indicates the baby is positive for HBsAb. This letter should not be reproduced without the permission of The Children's Bridge, 1400 Clyde Avenue, Suite 221, Nepean, Ontario K2G 3J2.