



# VIRAL HEPATITIS

PUBLISHED BY THE VIRAL HEPATITIS PREVENTION BOARD

Fact Sheet 5 - April 2000

## YOU'RE ADOPTING A CHILD FROM ABROAD. WHAT YOU SHOULD KNOW ABOUT HEPATITIS B.

### What is hepatitis B virus?

Hepatitis B is a viral infection of the liver. It is a major health problem worldwide. Approximately two billion people are estimated to have been infected with the hepatitis B virus at some point in their lives. The good news is that a safe and effective hepatitis B vaccine is available, conferring protection against hepatitis B.

### What are the effects of hepatitis B infection?

Hepatitis B virus (HBV) can be acquired in childhood or in adulthood. After becoming infected, adults may recover from hepatitis B infection after a mild or a severe illness, although some do develop long-term diseases as a result of infection. Six to 10 percent of infected adults will become chronic carriers of the virus; as such, they will be able to transmit the virus to others.

Children who are infected early in life have a greater chance of developing chronic infection, meaning that the infection does not clear itself and the person is more likely to be a carrier of the hepatitis B virus for life. Those infected as newborns are at the highest risk of becoming carriers and of subsequently developing long-term diseases such as liver cancer or liver cirrhosis (liver scarring). Chronically infected individuals can transmit the virus to others.

### How is the hepatitis B virus acquired?

HBV is acquired in a number of ways. It can be transmitted from mother to child at birth, through exposure to infected blood or blood products, through unhygienic needle injections, through sexual contact with an infected person, or through close contact with an infected person. This latter route of infection occurs mostly between children or household contacts, particularly in areas where HBV infection is common.

### Where is HBV infection most common?

Hepatitis B infection is more common in certain parts of the world than in others. It should be noted that many children adopted from overseas come from regions where hepatitis B is common and that 3-35% of children adopted from overseas are hepatitis B carriers.

The areas where hepatitis B infection is most common include: Southeast Asia, sub-Saharan Africa, the Amazon Basin, parts of the Middle East, the central Asian Republics and some countries of eastern Europe. In these

parts of the world as many as 70-90% of the population may at one time or another have been infected.

Parts of the Middle East, Central and South America, and central Asia and some parts of southern Europe have higher than average rates of infection, although in many of these regions of the world the infection rates are declining rapidly thanks to large vaccination campaigns. Even in areas where hepatitis B infection is not especially common (North America, western and northern Europe, and Australia) almost 5-10% of the population may have been exposed to the virus at one time.

- All children adopted from countries where hepatitis B is common should be tested for hepatitis B as soon as they arrive in their new country.
- All family members should be immunized for hepatitis B before the arrival of the adopted child to his or her new home.

### What tests should our adopted child have?

Families that adopt children from countries where hepatitis B infection is common should have their children tested for hepatitis B infection as soon as the family returns. Tests should be carried out in the adopting family's home country because every country does not necessarily have access to the most sensitive and accurate tests currently available. Hepatitis B testing should be done as part of an overall physical assessment of the adopted child.

Testing is imperative. Just because a child appears healthy is no indication that he or she has not been infected with hepatitis B virus. Most children who are carriers of the virus are outwardly healthy looking and no one can tell if a person is a carrier just by looking at him or her.

### What tests should be administered to determine if our child has been infected with HBV?

Several tests for hepatitis B infection exist:

- Hepatitis B surface antigen (HBsAg)
- Hepatitis B e antigen (HBeAg) (to be performed in case the child is HBsAg positive)
- Hepatitis B surface antibody (anti-HBs)
- Hepatitis B core antibody (anti-HBc)

If a child tests positive for HBsAg that child is infected with the hepatitis B virus. A positive result for an anti-HBs test

may mean that the child has either had hepatitis B in the past or has been vaccinated in the past. If the anti-HBc and anti-HBs tests are positive, the child has been exposed to hepatitis B virus but is not a carrier of the virus. If the anti-HBc and HBsAg tests are positive, the child could be a carrier of the virus and tests should be repeated after six months.

Hepatitis B virus is not the only form of viral hepatitis. It may be advisable to test adopted children (particularly those who are infected with hepatitis B virus or who were born in areas where hepatitis C is common) for other forms of viral hepatitis. Tests are available for hepatitis C.

### **Our child tested positive for HBV. What do we do?**

Children who are chronically infected with hepatitis B should be evaluated to determine if chronic liver disease is present and what treatment is required. If the child is chronically infected, life-long follow-up to determine the level of liver disease will be necessary. If the child already has severe liver disease, he or she will need to be referred to a paediatric gastroenterologist to determine the best treatment. Hepatitis B is a complex disease. There is no 100% efficient cure for hepatitis B. Alpha-interferon and lamivudine are sometimes used in patients with liver disease. Regular consultation with your paediatric gastroenterologist will be necessary.

### **Counselling is part of treatment.**

The impact of a diagnosis of hepatitis B should not be underestimated; counselling services for the family and, later for the child need to be an integral part of any treatment offered. Patients are presented with an illness that can run the course of a lifetime. Families should be made aware of the possibilities of transmission. Once the child reaches adolescence he or she should be advised about lifestyle modifications and the risk of sexually transmitting the hepatitis B virus.

### **What about the rest of the family?**

Vaccination for hepatitis B infection is essential for families considering foreign adoption. Although the risk that the adopted child will be infected with hepatitis B varies depending on his or her country of origin, there is no possibility of transmission to other members of the household if every family member has been immunized before the adopted child arrives in his or her new country. Friends or others who will have close contact with the child may also wish to be immunized. Consult with your physician to determine who outside the immediate family should be immunized.

### **Our child tested negative for hepatitis B. Should our child be immunized?**

The World Health Organization recommended in 1991 that all countries include hepatitis B immunization among their routine childhood immunizations. Over 110 countries have done so, although only 40% of the world's newborns are born in these countries. So yes, your adopted child should be immunized against hepatitis B, as recommended for all children.

### **Are hepatitis B vaccines safe?**

The first hepatitis B vaccine was introduced in 1982. Since that time several hepatitis B vaccines have been brought to market. All have been used extensively and have been shown to be safe and effective in preventing hepatitis B infection.

### **Where can we go for more information?**

#### **English websites:**

- <http://baaf.org.uk/pages/groups/medical.html>
- <http://www.calib.com/naic/>
- <http://www.adoption.com>
- <http://www.aidskids.org>
- <http://www.adoption.org/rwfas.html>

#### **French website:**

- <http://vosdroits.adminfrance.gouv.fr>

#### **German websites:**

- <http://www.adoption.de>
- <http://www.moses-online.org/infodienst/index.html>

#### **Italian website:**

- [http://www.comune.firenze.it/servizi\\_publici/bambini/bambini.htm](http://www.comune.firenze.it/servizi_publici/bambini/bambini.htm)

#### **Spanish websites:**

- <http://www.iin.org.uy/proyectos/adopcion> (also in English and French)
- <http://www.adoptionscentrum.se/spanish/> (also in Russian & Swedish)
- <http://www.mujeractual.com/familia/adopcion/marce.html>

### **About the VHPB**

The Viral Hepatitis Prevention Board is a multi-disciplinary group of experts who provide authoritative information and advice on hepatitis B. The VHPB has worked to raise awareness of hepatitis B as an occupational hazard; has discussed hepatitis B as a community acquired infection; has covered the control of hepatitis A infection and the eligibility of hepatitis A vaccine, and combined hepatitis A and B vaccines; has reviewed the situation surrounding hepatitis C; and has monitored the control of HBV and the adoption of universal HB vaccination programmes worldwide.



© The Viral Hepatitis Prevention Board.  
All rights reserved.  
No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical photocopying, recording or otherwise, without written permission of the publisher.

The Viral Hepatitis Prevention Board works under the auspices of the Society of Occupational Medicine and the European Public Health Association. The Board is supported in part by grants from the pharmaceutical industry (SmithKline Beecham Biologicals, Aventis Pasteur MSD, Merck Sharp & Dohme) but has strict scientific independence.

*Viral Hepatitis* is published and produced by the VHPB, and printed by Jacqmain Ltd., Antwerp, Belgium.

For further information please contact the VHPB Executive Secretariat at:  
The VHPB Executive Secretariat, Centre for the Evaluation of Vaccination  
WHO Collaborating Centre for Prevention and Control of Viral Hepatitis  
Epidemiology and Community Medicine  
University of Antwerp • Universiteitsplein 1 • B-2610 Antwerp, Belgium  
Tel: 32 (0)3 820 25 23 Fax: 32 (0)3 820 26 40  
<http://esoc-www.uia.ac.be/esoc/vhpb/index/html>