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CHRONIC HEPATITIS B

IMPLICATIONS FOR HEALTH AND FAMILY

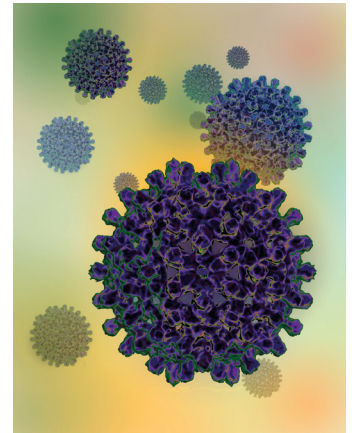
It could have seemed that it was just the flu or a bad cold, with fever and nausea, perhaps with a loss of appetite. Maybe there were joint pains.

If there was no noticeable jaundice (yellowing of the skin and or whites of the eyes) or pain in the right upper abdomen, an individual might not realize they were ill with Hepatitis B virus (HBV).

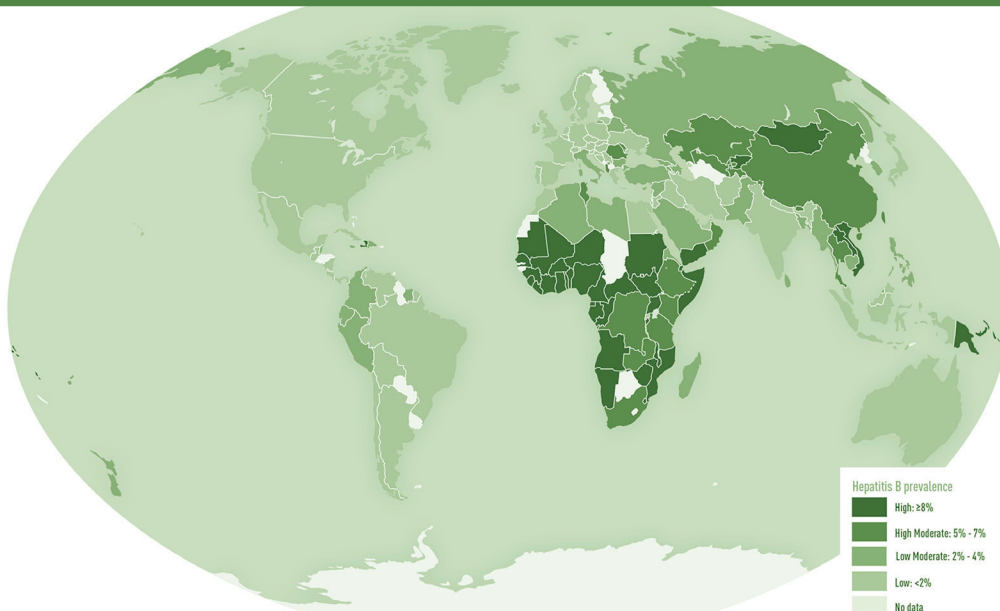
In fact, most people who become ill with this viral infection have no noticeable symptoms. Children and infants especially can show no outward sign of infection.

Furthermore, if the immune system cannot get rid of the hepatitis B virus, then an individual is living with chronic hepatitis B.

Chronic HBV is a potentially life-threatening condition, with an estimated over 292 million people worldwide affected by this illness.



Those who were born where hepatitis B is endemic are at higher risk for having contracted HBV. In addition, if someone's parents were born in one of these areas or were born prior to the hepatitis B vaccine's availability, they are also at higher risk for having contracted HBV.



The map shows areas where hepatitis B is endemic. In medical terms, endemic means that a disease occurs at a somewhat constant level in a specific area or country.

MAP 4-6. Prevalence of hepatitis B virus infection¹

Boundary representation is not necessarily authoritative.

¹ Disease data source: Schweitzer A, Horn J, Mikolajczyk R, Krause G, Ott J. Estimations of worldwide prevalence of chronic hepatitis B virus infection: a systematic review of data published between 1965 and 2013. www.thelancet.com. 2015;Vol 386.



Protecting newborns from HBV

One of the ways a child can become infected with the virus is during the birth process, even if the baby is born by C-section.

Many children who are infected before they turn one year old go on to develop chronic HBV.

One mother, born in Vietnam, had no idea she was positive for HBV until she was pregnant with her first child.

“My first concern was the health consequences for my child. I had no idea that I had HBV. I had no symptoms,” said Tram.

She was grateful to learn that the hepatitis B vaccine which is given to newborns within 12 hours of birth would protect her baby girl’s health.



For children, the Advisory Committee on Immunization Practices has this recommendation:

- administration of hepatitis B vaccine and hepatitis B immune globulin (HBIG) for infants born to HBV-infected women within 12 hours of birth, followed by completion of the vaccine series and postvaccination serologic testing;
- universal hepatitis B vaccination within 24 hours of birth, followed by completion of the vaccine series; and
- vaccination of children and adolescents aged <19 years who have not been vaccinated previously.¹

When asked what she would say to other mothers in her situation, Tram replied that she would encourage

other mothers not to feel intimidated by the diagnosis, not to feel inferior, not to feel it is their fault.

She added, “Be empowered. You don’t have to feel helpless. Get tested. Stay informed and inform your children.”

Other ways to contract the virus

Another common way to become infected is through contact with the blood of someone who is infected with the virus. The third most common way is through unprotected sex with someone who carries the virus.

Long-term effects of chronic HBV

Severe cirrhosis, or scarring, of the liver and liver cancer can occur due to chronic HBV.

According to research at the Asian Liver Center at Stanford University in California, “without appropriate medical management, as many as 1 in 4 people chronically infected with HBV will die from liver cancer or liver failure.”²

Thus, it is essential for those who might have been infected with the hepatitis B virus to see their doctor for screening.

Methods for treating and managing

A simple blood test can tell your doctor if you have been infected with the virus. If there is reason to suspect chronic HBV, your doctor can use other blood tests and ultrasound exams to assess the health of your liver.

The incidence of liver cancer for those with chronic HBV rises after 40 years of age, especially in men, who

Hepatitis B Transmission

The Asian Liver Center at Stanford University recommends the following monitoring schedule for patients with chronic HBV.

Every	Test	Screens for
6 months	ALT (alanine transaminases) blood test AFP (alpha-fetoprotein) blood test	Liver damage Liver cancer
1 year*	Ultrasound	Liver cancer
<p>* If you have cirrhosis or a family history of liver cancer, increase the frequency of your ultrasound screening to every 6 months.</p> <p>Table and information courtesy the Asian Liver Center, Stanford Medicine</p>		

are at twice the risk.

Chronic Hepatitis B is called a silent killer because many people with this chronic infection have no symptoms. Indeed, the impact of chronic HBV on the life and health of an individual and on their family can be enormous. An important key factor in dealing with this disease is early detection with monitoring and appropriate treatment.

According to an article published in Hepatology Communications in January 2019, antiviral therapy can be “effective in suppressing HBV replication and in decreasing the risk of developing cirrhosis, liver failure, hepatocellular carcinoma (HCC), and death.”³

However, the treatments at this point are not capable of eliminating the virus from the body. There is still a risk of HCC for patients with chronic HBV.

Chronic HBV, liver cancer, and COVID-19

Much information is being gathered as the world’s medical community grapples with COVID-19 and its effects.

BIRTH - HBV can be transmitted from a chronically infected mother to her child during the birthing process. This is one of the most common modes of transmission for communities in HBV endemic regions. Many pregnant mothers with chronic hepatitis B are unaware of their infection and end up silently passing the virus to the next generation.

BLOOD - HBV can be transmitted through direct contact with infected blood. This includes:

- Wound-to- wound contact
- Reusing or sharing needles for tattoos, piercings, acupuncture, or injection drugs
- Reusing syringes or medical devices
- Sharing razors or toothbrushes contaminated by blood
- Blood transfusions

SEX - HBV can be transmitted through unprotected sex with a person infected with HBV. The use of condoms can reduce, but not eliminate, the risk of infection. Vaccination remains the most effective way to protect against HBV.

HBV is NOT transmitted through food or water.

It is not spread through:

- Sharing food or water
- Sharing eating utensils or drinking glasses
- Tears, sweat, urine, or stool
- Coughing or sneezing
- Hugging or kissing
- Breastfeeding
- Mosquitoes

Courtesy the Asian Liver Center,
Stanford School of Medicine



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At this point, the Center for Disease Control (CDC) does not have extensive research results related to the effect on the health of individuals with HBV who contract COVID-19.

However, according to the the CDC, "adults at any age with certain underlying medical conditions, including people with liver disease, might be at higher risk for severe illness from COVID-19."

The CDC has added updated information as of February 8, 2021 regarding the question if COVID-19 possibly damages the liver.

According to the CDC, "Some patients hospitalized for COVID-19 have had increased levels of liver enzymes — such as alanine aminotransferase (ALT) and aspartate aminotransferase (AST). Increased levels of liver enzymes can mean that a person's liver is at least temporarily damaged. People with cirrhosis [liver scarring] may be at increased risk of COVID-19. Some studies have shown that people with pre-existing liver disease (chronic liver disease, cirrhosis, or related complications) who were diagnosed with COVID-19 are at higher risk of death than people without pre-existing liver disease."⁴

Therefore, the precautions for avoiding exposure to COVID-19 are imperative for those with chronic HBV and related liver cancer.

Living life with chronic HBV

Living with chronic HBV is not something to be taken lightly. Happily, however, with good health care, many people are able to live a productive, healthy, normal lives.

Take good care of your liver because it takes care of you.

How your liver takes care of you

The liver plays a significant role in the function of the body. It helps you digest food. It stores sugar, vitamins and minerals, regulates fat stores and cholesterol, and metabolizes alcohol. It deals with poisonous substances and helps fight infection.

As always, a big part of maintaining good health is making sure you eat nutritionally sound food and get regular exercise.

Tips for managing with chronic HBV

- Avoid alcohol intake and combining drugs and medications with alcohol
- Avoid environmental pollutants
- Eat a healthy diet that includes fresh fruits and vegetables, particularly broccoli, cauliflower and cabbage

Please discuss the special nutritional needs for chronic HBV patients with your doctor, who might recommend an appointment with a nutritionist.

All content in Wellness Connect is for educational purposes. It is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of a qualified health care provider with any questions or concerns you might have regarding your health.



Resources

Centers for Disease Control and Prevention (CDC)
Hepatitis B Information

Asian Liver Center | Stanford Medicine

Mayo Clinic
Hepatitis B

World Health Organization
Hepatitis B
Multiple Language Versions

References

1 Centers for Disease Control and Prevention (2019, November 8) *Hepatitis B Vaccination of Infants, Children, and Adolescents.*

2 Asian Liver Center, Stanford Medicine (2020) *WHAT IS HEPATITIS B?*

3 Lok, A. S. (2019, January). Hepatitis B Treatment: What We Know Now and What Remains to Be Researched *Hepatology Communications.*

4 Centers for Disease Control and Prevention (2021, Feb. 8, 2021) *What to Know About Liver Disease and COVID-19.*

