



# Infection Control Newsletter

## Jordan University Hospital

### September 2011 - No 3

#### What do you know about Hepatitis B virus?

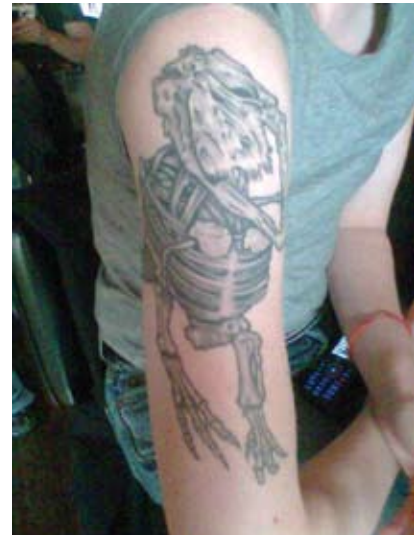
Hepatitis B is a liver disease caused by hepatitis B virus. Hepatitis: means inflammation of the liver. It is estimated that 350 million individuals worldwide are infected with the virus.

#### How could I get hepatitis B?

Generally, you get hepatitis B through contact with an infected person's blood, semen, or other body fluid.

In more detail, you could get hepatitis B from:

- being born to a mother with hepatitis B (The rate of transmission of hepatitis B from mother to newborn is very high, and almost all infected infants will develop chronic hepatitis B. Fortunately, transmission can be significantly reduced through immunoprophylaxis).
- having sex with an infected person.
- being tattooed with unsterilized tools.
- getting an accidental needle stick with a needle that was used on an infected person.
- using an infected person's razor or toothbrush.
- sharing drug needles with an infected person.



**Note.** You cannot get hepatitis B from shaking hands with or hugging an infected person.

#### What are the symptoms of hepatitis B?

Hepatitis B usually has no symptoms. However, some patients might have one or more of the following symptoms:

- yellowish eyes and skin (jaundice)
- easy bruising
- tiredness
- fever



### **What is the course of Hepatitis B Virus disease?**

- 95% of adults who get hepatitis B are able to clear the virus and cure themselves of infection.
- The remaining 5% of adults with acute hepatitis B go on to develop chronic infection.
- Those who acquire the infection in childhood are much more likely to have chronic infection.
- Chronic hepatitis B may lead to cirrhosis or liver failure

### **How is hepatitis B treated?**

- Hepatitis B usually is not treated unless it becomes chronic.
- Chronic hepatitis B is treated with drugs that slow or stop the virus from damaging the liver.
- The length of treatment is usually for several months.
- Drugs given by shots include interferon; drugs taken by mouth might include lamivudine.
- Persons with hepatitis B should avoid drinking alcohol.



### **How do you prevent the transmission of hepatitis B virus from the mother to the newborn infant?**

- Infected mothers can pass hepatitis B to their newborn infants.
- All pregnant women should ask their physicians about blood tests for hepatitis B
- Infants born to infected mothers should receive (Hepatitis B Immunoglobulin) and hepatitis B vaccine at birth. This is 95% effective in eliminating the risk of hepatitis B in the infant.

### **What is the risk of infection after an occupational exposure?**

A percutaneous needle stick injury will transmit the virus in 30% of cases.

### **How Can Healthcare Workers Protect Themselves?**

There are three important ways that healthcare workers can protect themselves from HBV infection.


1. Vaccination against hepatitis B: The vaccine is administered in three doses over a six-month period. The vaccine is administered intramuscularly.
2. Unvaccinated healthcare workers who sustain a significant exposure to blood and body fluids (e.g., needlestick or mucous membrane contact) should have a single dose of HBIG (hepatitis B immunoglobulin) per the doctor's advice as soon as possible after the exposure. Exposed healthcare workers should also be given the vaccine series.
3. Healthcare workers should follow the universal precaution guidelines to prevent exposure to blood and body fluids.

**Note:** The hepatitis B vaccine is safe for pregnant women.

### What to do if you were exposed to blood?

1. Wash needle sticks and cuts with soap and water. In case of exposure to eyes, irrigate with clean water, or saline. In case of mouth or nose, flush splashes with water.
2. Inform your supervisor.
3. Contact the infection control office.

No scientific evidence shows that using antiseptics or squeezing the wound will reduce the risk of transmission of a bloodborne pathogen. Using a caustic agent such as bleach is not recommended.

A graphic featuring a dark blue rectangular box with the word "Quiz" written in white, serif font. On either side of the box is a large, red, stylized question mark.

#### Q1: Is there a cure for AIDS?

- a) Yes, antiretroviral medication kills the HIV cells
- b) No, there's no cure yet

Answer: These drugs only slow down the progression from being HIV positive to full blown AIDS (the final and fatal stage of infection).

#### Q2: How do health care workers (HCW) protect themselves from infection with HIV?

- a) In case of contact, they are advised to take Post Exposure Prophylaxis (PEP) drugs
- b) They don't run a risk of contracting the infection
- c) Workers must take all possible precautions including using gloves, handling needles with care ...etc
- d) Both a and c

Answer: HCW generally operate in high-risk environments and are hence advised to take the utmost care when dealing with infected patients. However, if viral contact does take place, PEP drugs should be taken within a maximum of 48 hours.

#### Q3 Patients infected with HBV who have no symptoms and have normal liver function tests are "healthy carriers."

- a) True
- b) False

Answer. Although patients with chronic hepatitis B often do not have symptoms, "healthy carrier" is still an inaccurate term. Calling someone a "healthy carrier" indicates that while they are infected with HBV, it is not something they should be concerned about – this is incorrect. One in 4 chronic cases of HBV die of cirrhosis or liver cancer without careful monitoring, therefore it is critical to remain vigilant about regularly screening for liver damage (through the measurement of ALT every 6 months) and liver cancer (through Alpha Fetoprotein (AFP) measurement every 6 months and ultrasound every year).

**Q4. A booster shot of the HBV vaccine is recommended after the 3-dose vaccination series is completed.**

- a) True
- b) False

Answer: There is NO recommendation for a booster of the HBV vaccination. Successful completion of the series provides complete and lifelong protection against HBV in 95% of people vaccinated.

**Q5. Hepatitis B is transmitted through eating contaminated food.**

- a) True
- b) False

Answer: Hepatitis A is the virus that spreads through contaminated food. Hepatitis B Virus is transmitted mainly through blood-borne routes and unprotected sex, and NOT through contaminated food, sharing food with an infected person, hugging, kissing, or shaking hands with an infected person.

**Q6. There are vaccines to prevent Hepatitis C virus?**

- a) True
- b) False

Answer: There is no vaccine for hepatitis C virus at this time.

