

# FACT SHEET

# HEPATITIS B

## Information for Health Professionals

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### **What is Hepatitis B?**

The hepatitis B virus (HBV) is a DNA virus and is a major cause of acute and chronic hepatitis, cirrhosis, and liver cancer. Each year in the U.S. alone, there are approximately 78,000 new infections, and there are an estimated 200,000-300,000 million carriers in the world.

### **How is Hepatitis B transmitted?**

Hepatitis B virus (HBV) can be transmitted percutaneously (needlestick), permucosally (blood into eye, sexual intercourse), non-intact skin (blood or secretions into open wounds/cuts/dermatitis, etc.), perinatally, and continuous close contact.

Because HBV is stable on environmental surfaces for at least 7 days, indirect inoculation can occur via inanimate objects (such as toothbrushes and razors). It is not transmitted via the fecal-oral route (as hepatitis A is).

### **What is the incubation period?**

The incubation period is 45-180 days, averaging between 60 and 90 days.

### **What is the period of communicability?**

Hepatitis B surface antigen (HBsAg) can be identified in serum from 30-60 days postexposure and persists for variable periods of time. Approximately 10% of infected adults will become chronic carriers.

### **How is Hepatitis B diagnosed?**

Hepatitis B is diagnosed through two different antigen-antibody responses detected in the blood (HBsAg, anti-HBc IgM).

### **How is Hepatitis B prevented?**

Pre-exposure

- Receive the hepatitis B vaccine.
- Use safe sex practices, always use a condom
- Protect from coming in contact with the blood or other body fluids of others

Post-exposure prophylaxis:

- Hepatitis B vaccine
- Hepatitis B immune globulin (HBIG): Temporary, passive protection

### **Is a booster dose of Hepatitis B vaccine needed?**

If a person has three documented doses of hepatitis B vaccine a booster dose is NOT recommended.

### **Are extended intervals in vaccination acceptable?**

- If a patient has had a dose of vaccine and the interval between that dose and the one they seek now is longer than the recommended timeframe they do not need to re-start the series. Finish the series. If the series is interrupted after the first dose, the second dose should be administered as soon as possible, and the second and third doses should be separated by an interval of at least 8 weeks. If only the third dose has been delayed, it should be administered as soon as possible.

### **Who should be vaccinated?**

Persons who are at risk for exposure to blood, blood products or blood-contaminated fluid should be vaccinated.

These include:

- healthcare workers
- clients and staff of institutions for the developmentally disabled
- hemodialysis patients
- sexually active homosexual and bisexual men
- users of illicit injectable drugs
- recipients of certain blood products
- household and sexual contacts of hepatitis B carriers
- inmates of long term correctional facilities
- sexually active heterosexual persons with multiple sexual partners
- babies born to hepatitis B-positive mothers

- international travelers who plan to spend more than 6 months in areas of high endemicity and who will have close contact with the local population.
- all children born on or after July 1, 1994 must show proof of receiving three doses of hepatitis B vaccine to be enrolled in a licensed child care center or school per Iowa Administrative Code 641.1.

**What should be done after a known or suspected exposure?**

For ANY exposure of a person not previously vaccinated, hepatitis B vaccine is ALWAYS recommended. Exposure should be reported and a postexposure evaluation done. Treatment will depend on the vaccination status of the exposed, the vaccine responder status of the exposed and the hepatitis status of the source if known.

**What measures need to be taken for the pregnant women and the newborn?**

Prenatal screening of all pregnant women identifies those who are HBsAg positive. Immediate treatment of infants born to HBsAg positive mothers with HBIG and Hepatitis B vaccine is recommended. If the mother is not currently infected with hepatitis B but presents during prenatal care with risk factors, vaccination is indicated. Pregnancy is not a contraindication to vaccination.

**Does HBIG and Hepatitis B vaccine interfere with routine childhood immunizations?**

Vaccinations with live virus vaccines should be deferred until about 3 months after administration of HBIG. The hepatitis B vaccine does not interfere with other childhood immunizations.

**Is risk of transmission in child care centers high?**

No, the risk of transmission in child care centers appears to be extremely low. Standard Precautions apply.

**When is a person no longer infectious?**

If a person is HBsAg and HBc IgM negative, then they are no longer infectious.

**What if there appears to be an outbreak?**

If there are 2 or more current cases with a suspected common source, contact the Center for Acute Disease Epidemiology at (800) 362-2736.