

JAIL BULLETIN

JULY 1993

NUMBER 99

This Jail Bulletin, adapted from material distributed by the Nebraska Department of Health, describes the three primary types of viral hepatitis and provides information regarding its transmission, symptoms and treatment. Due to the unique nature of the three forms of hepatitis, they will be addressed for the most part, individually to highlight the distinct aspects of each virus.

HEPATITIS A

A. What is Hepatitis A?

Hepatitis A (formally called infectious hepatitis) is a liver disease caused by the hepatitis A virus.

B. Who gets Hepatitis A?

Anyone can get Hepatitis A, but it occurs more frequently in children and adults in the western world.

C. How the virus is spread.

The Hepatitis A virus enters through the mouth, multiplies in the body and is passed in the stool. If careful hand washing with soap is not done, the virus can then be carried on an infected person's hands and can be spread by direct contact, or by consuming food or drink which has been handled by that individual. In some cases it can be spread by consuming water contaminated with improperly treated sewage. Hepatitis A is not normally spread to associates in the work environment.

D. Hepatitis A symptoms.

The symptoms of Hepatitis A may include fatigue, poor appetite, fever and vomiting. Urine may become darker in color and then jaundice (a yellowing of the skin and whites of the eyes) may appear. This disease is rarely fatal and most people recover in a few weeks without any complications. Infants and young children tend to have very mild or no symptoms and are less likely to develop jaundice than are older children and adults. Not everyone who is infected will have all of the symptoms.

E. When symptoms appear.

The symptoms may appear two to six weeks after exposure but usually three to four weeks after exposure.

F. How long can an infected person spread the virus?

The contagious period begins about two weeks before the symptoms appear and continues up to one week after onset of jaundice.

G. Does past infection with Hepatitis A virus make a person immune?

Once an individual recovers from Hepatitis A, he or she is immune for life and does not continue to carry the virus.

H. Treatment for Hepatitis A.

There are no special medicines or antibiotics that can be used to treat a person once the symptoms appear. Generally, bed rest is all that is needed.

I. Hepatitis A prevention.

A vaccine is not currently available. The single most effective way to prevent spread is careful hand washing after using the toilet. Also, infected people should not handle foods during the contagious period. Household members, daycare contacts or others in close contact with an infected person should call a doctor, their local or state health department for information on how to obtain a shot of immune globulin which minimizes the chances of becoming ill. In normal working situations people do not need to receive immune globulin.

HEPATITIS B

A. What is Hepatitis B?

Hepatitis B (formally called serum hepatitis) is a liver disease caused by the Hepatitis B virus. About 40 cases are reported in Nebraska each year. This is the most serious form of Hepatitis, with an estimated one million carriers in the United States.

B. Anyone can get Hepatitis B, but those at greater risk include:

B Drug users who share needles;

B Certain health care workers who have contact with infected blood;

B Homosexual males, particularly those with multiple partners;

- B Persons who are in centers for developmentally disabled;
- B Hemodialysis patients;
- B Certain household contacts with an infected person.

C. How the virus is spread.

Hepatitis B virus can be found in the blood and, to a lesser extent, saliva, seaman and other body fluids of an infected person. It is spread by direct contact with infected body fluids; usually by sharing needles, sexual contact or by needle stick injury. It can be spread from mother-to-child at birth or soon after birth or blood transfusions. Almost a quarter of the cases may result from unknown sources in the general population. In the family the virus can be spread from adults to children. Hepatitis B virus is not spread by casual contact or by respiratory droplets.

D. Related virus.

A virus related to Hepatitis B is Hepatitis D formally called Delta Hepatitis and is found mainly in intravenous drug users who are carriers of the B virus which is necessary for the Hepatitis D virus to spread. Hepatitis D is spread mainly by needles and blood. The D virus infects only individuals infected with hepatitis B and may be transmitted by carriers of D and B.

E. Symptoms of Hepatitis B.

The symptoms include fatigue, poor appetite, fever, vomiting and occasionally joint pain, hives or rash. Urine may become darker in color and then jaundice may appear. Some individuals may experience few or no symptoms. Chronic carriers are at increased risk of cirrhosis of the liver and liver cancer. Symptoms may appear two to six months after exposure, but usually within three months.

F. How long can an infected person spread the virus?

The virus can be found in blood and other body fluids several weeks before symptoms appear and generally persists for several months afterward. Approximately 10 percent of infected people may become long-term carriers of the virus and may remain contagious.

G. Treatment for hepatitis B.

There are no special medicines or antibiotics that can be used to treat a person once the symptoms appear. Generally, bed rest is all that is needed.

H. What precautions should infected persons take?

Hepatitis B carriers should follow standard hygienic practices to ensure that close contacts are not directly contaminated by his or her blood or other body fluids. Infected persons must not share razors, toothbrushes, needles or any other object that may have become contaminated with blood. Use of latex condoms during sexual activity may reduce transmission of Hepatitis B virus among homosexuals and heterosexuals. In addition, susceptible household members, particularly sexual partners, should be immunized with Hepatitis B vaccine. Infected people must not donate blood and should inform dental and medical care providers so that proper precautions will be followed.

I. Prevention of Hepatitis B.

A vaccine to prevent Hepatitis B has been available for several years. It is safe, effective and is recommended for people working or living in high risk settings who have not already been infected. A special Hepatitis B immune globulin (HBIG) is also available for those who have been exposed to the virus. In the event of exposure to Hepatitis B, one should consult with a physician or a local health department.

HEPATITIS C

A. What is Hepatitis C?

Hepatitis C is a liver disease caused by the Hepatitis C virus (HCV) which is found in the blood of persons who have the disease. Hepatitis C is now the most common cause of hepatitis after blood transfusion. More than one percent of Americans are carriers of the virus.

B. Who gets Hepatitis C?

About 40% of all persons who get Hepatitis C do not know how they were infected with HCV. However, Hepatitis C occurs most often in persons who have a job that exposes them to human blood, are hemodialysis patients or who have shared needles during drug abuse. A person may be at risk if they have multiple sex partners or who live with a person who has Hepatitis C.

C. How is the virus spread?

HCV is spread primarily by exposure to human blood. A person can spread

HCV by sharing needles to inject drugs or through exposure to human blood in the workplace.

Although the risk of getting Hepatitis C from a blood transfusion still exists, the risk is very low because donated blood has been screened for HCV since May of 1990. Hepatitis C has been transmitted between sex partners and among household members; however, the degree of risk is unknown.

D. Symptoms of Hepatitis C.

Some individuals experience appetite loss, extreme fatigue, nausea and vomiting, vague stomach pain, fever and jaundice. Symptoms may occur from two to six months after exposure but usually within two months. Some persons who are infected with HCV have no symptoms and can infect others without knowing it.

E. How long can an infected person spread the virus?

Some individuals carry the virus in their blood streams and may remain contagious for years. A chronic carrier state may develop in as many as 50% of the infected individuals.

F. Testing and treatment.

A specific serologic screening test for the Hepatitis C carrier state has been developed, however, there are no special medicines or antibiotics that can be used to treat individuals with Hepatitis C.

G. How serious is Hepatitis C?

In the United States, approximately 600 persons each year die of liver failure shortly after getting Hepatitis C. About half of all persons who get Hepatitis C never fully recover and can carry the virus for the rest of their lives. These persons have chronic (or lifelong) Hepatitis C, and some may eventually develop cirrhosis of the liver and liver failure.

H. Prevention of Hepatitis C.

People who have Hepatitis C should remain aware that their blood and possibly other body fluids are potentially infective. Care should be taken to avoid blood exposure to others by not sharing toothbrushes, razors, needles or any other objects that can be contaminated with blood. In addition, infected people must not donate blood and should inform their dental and medical care providers so that proper precautions will be followed.

QUIZ

Nebraska Jail Standards require that jail staff receive eighteen (18) hours of in-service training each year. The Jail Bulletin may be used to supplement in-service training if an officer studies the bulletin, completes the quiz, and this process is documented by the jail administrator for review during annual jail inspections.

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SUBJECT: Viral Hepatitis

N A M E

DATE _____

1. Which human organ is most at risk when one is infected with a hepatitis virus?
 - A. Stomach
 - B. Pancreas
 - C. Liver
 - D. Kidneys
2. When a person is infected with a hepatitis virus, symptoms always appear right away.
True _____ False _____
3. Which of the following are symptoms generally found in those infected with a viral hepatitis?
 - A. Chronic cough
 - B. Fatigue
 - C. Jaundice
 - D. Nausea vomiting
 - E. All of the above
 - F. B, C and D
4. A vaccine to prevent Hepatitis B has been available for several years.
True _____ False _____
5. Hepatitis A virus enters through a person's mouth while Hepatitis B and C are spread by contact with body fluids such as blood.
True _____ False _____
6. A treatment is readily available for all forms of viral hepatitis.
True _____ False _____
7. List four ways that the Hepatitis B and C virus can be spread.
 - 1)
 - 2)
 - 3)
 - 4)

