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www.immunize.org/catg.d/p4115.pdf

Hepatitis B

100 times easier to catch than HIV!

Vaccinations protect your health!

If you can't afford a doctor, call your city or county health department.

For more information on where to get vaccinated against hepatitis B, call:

Immunization Action Coalition
1573 Selby Avenue, Suite 234
St. Paul, Minnesota 55104
(651) 647-9009
website: www.immunize.org

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website: www.immunize.org

These people are called "chronically infected." Chronically infected people usually do not have symptoms, but are at increased risk for liver failure and liver cancer and need ongoing medical care.

How do I know if I have or have had hepatitis B?
The only way to know for sure is to have your blood tested. Up to 70% of gay and bisexual men have already been infected with HBV.

Will hepatitis B vaccine protect me from hepatitis A or hepatitis C?
NO. Hepatitis A and hepatitis C are different diseases caused by different viruses. Hepatitis A occurs often in men who have sex with men. There is a vaccine for hepatitis A. Talk to your doctor about whether you need this vaccine. There is no vaccine for hepatitis C.

Where can I receive hepatitis B shots?
Talk to your health care provider or your local public health department.
What is hepatitis B?

Hepatitis B is a sexually transmitted liver disease caused by the hepatitis B virus (HBV). HBV is spread much like HIV, the virus that causes AIDS. HBV, however, is easier to catch than HIV because it is over 100 times more concentrated in an infected person's blood and it can exist on surfaces outside the body.

How serious is hepatitis B?

HBV infection can cause severe liver disease, including liver failure (cirrhosis) and liver cancer. Over 5,000 people die every year from hepatitis B-related liver disease.

How great is my risk for getting HBV infection?

HBV infects one out of every 20 people living in the United States. Gay and bisexual men who have multiple partners are 10 to 15 times more likely to acquire HBV than the general population.

How do I protect myself from HBV infection?

- Get the hepatitis B shots
- Continue to practice "safer" sex
- Put a barrier between you and another person's body fluids and blood (e.g., condom, dental dam)
- Tell your friends at risk to get vaccinated with hepatitis B vaccine!

How is HBV spread?

HBV is not just a sexually transmitted disease. It is a hardy virus that can exist on almost any surface for up to one month. HBV is found in the blood, semen, and vaginal secretions of infected people, and low concentrations can be found in saliva.

HBV can be spread by:
- unprotected anal or vaginal sex
- sharing needles used for drugs, body piercing, or tattooing
- contact with open sores
- sharing toothbrushes, razors, nail clippers, or washcloths
- living in a household with a person with ongoing HBV infection.
- human bites

You do not get HBV from sneezing, coughing, or holding hands.

What are the symptoms of HBV?

- extreme tiredness
- joint pain
- loss of appetite
- nausea, vomiting
- fever
- dark-colored urine
- bloated and tender belly
- yellowish tinged skin and eyes

Only about half of people who are infected with HBV get symptoms. People who are infected with HBV, whether they have symptoms or not, can spread the disease to others!

Do people fully recover from HBV?

Approximately 6% of adults who become infected will carry HBV in their bodies for years or for life and remain contagious.
What is hepatitis B?
Hepatitis B is a serious public health problem that affects people of all ages in the United States and around the world. In 2001, an estimated 78,000 people contracted hepatitis B virus (HBV) infection in the United States. Hepatitis B is caused by a highly infectious virus that attacks the liver and can lead to severe illness, liver damage, and in some cases, death.

The best way to be protected from hepatitis B is to be vaccinated with hepatitis B vaccine, a vaccine used in the U.S. for more than two decades and proven safe and effective.

Who is at risk for HBV infection?
About 5% of people in the U.S. will get infected with HBV sometime during their lives. If you engage in certain behaviors, your risk may be much higher. You may be at risk if you:
- have a job that exposes you to human blood
- share a household with someone who has lifelong HBV infection
- inject drugs
- have sex with a person infected with HBV
- have sex with more than one partner during a six-month period
- received blood transfusions in the past before excellent blood testing was available (1975)
- are a person whose parents were born in Asia, Africa, the Amazon Basin in South America, the Pacific Islands, Eastern Europe, or the Middle East
- were born in an area listed above
- were adopted from an area listed above
- are an Alaska native
- have hemophilia
- are a patient or worker in an institution for the developmentally disabled
- are an inmate of a long-term correctional facility
- travel internationally to areas with a high prevalence of hepatitis B

The largest outbreak of hepatitis B in the U.S. occurred in 1942 in military personnel who were given vaccine to protect them from yellow fever. It was unknown at the time that this vaccine contained a human blood component that was contaminated with HBV. The outbreak caused 28,585 cases of hepatitis B with jaundice.

How is HBV spread?
HBV is found in blood and certain body fluids—such as serum, semen, and vaginal secretions—of people infected with HBV. HBV is not found in sweat, tears, urine, or respiratory secretions. Contact with even small amounts of infected blood can cause infection.

Hepatitis B virus can be spread by:
- unprotected sex
- injecting drug use
- an infected mother to her child during birth
- contact with the blood or open sores of an infected person
- human bites
- sharing a household with a chronically infected person
- sharing items such as razors, toothbrushes, or washcloths
- pre-chewing food for babies or sharing chewing gum
- using unsterilized needles in ear or body piercing, tattooing, or acupuncture
- using the same immunization needle on more than one person

Hepatitis B virus IS NOT spread by:
- casual contact like holding hands
- eating food prepared by an infected person
- kissing or hugging
- sharing silverware, plates, or cups
- visiting an infected person’s home
- sneezing or coughing

What are the symptoms of hepatitis B?
Most people who get HBV infection as babies or children don’t look or feel sick at all. Similarly, almost half of adults who get infected don’t have any symptoms or signs of the disease. If people do have signs or symptoms, they may experience any or all of the following:
- loss of appetite
- yellowing of skin and eyes (jaundice)
- nausea, vomiting
- fever
- weakness, tiredness, inability to work for weeks or months
- abdominal pain and/or joint pain
- dark urine

I’m not in a risk group. How did I get HBV infection?
Many people don’t know when or how they acquired the infection. When they get the blood test results indicating they’ve been infected with HBV, they are taken by surprise. Studies have demonstrated that 30–40% of people who acquire HBV infection are unable to identify how they became infected.
Appendix B: Patient Materials

To access the current, ready-to-copy version of this piece, visit

www.immunize.org/catg.d/p4090.pdf

Questions Frequently Asked About Hepatitis B

Interpretation of the Hepatitis B Blood Test Results

<table>
<thead>
<tr>
<th>Tests</th>
<th>Results</th>
<th>Interpretation</th>
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<tbody>
<tr>
<td>HBsAg anti-HBs ant-HBs</td>
<td>negative</td>
<td>susceptible</td>
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<tr>
<td>HBsAg anti-HBs ant-HBs</td>
<td>negative</td>
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</tr>
<tr>
<td>HBsAg</td>
<td>negative</td>
<td>immune due to vaccination</td>
</tr>
<tr>
<td>HBsAg</td>
<td>positive</td>
<td>immune due to natural infection</td>
</tr>
<tr>
<td>HBsAg</td>
<td>positive</td>
<td>newly infected</td>
</tr>
<tr>
<td>HBsAg</td>
<td>positive</td>
<td>chronically infected</td>
</tr>
<tr>
<td>HBsAg</td>
<td>negative</td>
<td>four interpretations possible!</td>
</tr>
</tbody>
</table>

When the test was positive. If the "HBsAg" was positive, this means that you are either chronically infected with HBV or were recently infected. If only the "anti-HBs" was positive, it is most likely that you either had a "false-positive" test or are immune to hepatitis B. It is important that you understand the full meaning of your test results. If you are not sure how to interpret these test results, call your blood bank for an explanation or have the blood bank send the test results to your physician. You may need to provide written permission for the blood bank to release these results to your physician.

(continued on next page)

*Postvaccination testing, when it is recommended, should be done 1–2 months after the final dose.
†1. May be recovering from acute HBV infection.
2. May be distantly immune, and the test is not sensitive enough to detect a very low level of anti-HBs in serum.
3. May be susceptible with a "false positive" anti-HBs.
4. May be chronically infected and have an undetectable level of HBsAg present in the serum.

People who do not recover from HBV infection are chronically infected, and there are over one million chronically infected people in the United States today. A chronically infected person is someone who has had HBV in her/his blood for more than six months. While approximately 5% of adults who acquire HBV infection become chronically infected, children less than five years of age have a greater risk. The younger the child is at the time of infection, the greater the risk that the child will have a lifelong infection. Many babies born to chronically infected mothers will also become chronically infected with HBV unless the babies are given two shots in the hospital and at least two more during the 6 months after birth to protect them from the infection. A chronically infected person usually has no signs or symptoms of HBV infection but remains infected for years or for a lifetime and is capable of passing HBV on to others. Sometimes chronically infected people will spontaneously clear the infection from their bodies, but most will not. Although most chronically infected people have no serious problems with hepatitis B and lead normal, healthy lives, some develop liver problems later. Chronically infected people are at significantly higher risk than the general population for liver failure or liver cancer.
Questions Frequently Asked About Hepatitis B

How can I take care of myself if I am chronically infected with HBV?

A person with HBV infection should see a physician knowledgeable about the management of liver disease every 6–12 months. The physician will do blood tests to check the health of the liver as well as test for evidence of liver cancer. It is best for chronically infected people to avoid alcohol because alcohol can injure the liver. Additionally, your physician should know about all the medicines you are taking, even over-the-counter drugs, because some medicines can hurt the liver. If there are any liver test abnormalities, consultation with a liver specialist regarding your need for further testing and treatment is important.

If your liver disease has progressed...

If your physician tells you your liver disease has progressed, here are some extra precautions you should take:

- Get a yearly influenza vaccination. Patients with severe liver disease (cirrhosis) should also receive pneumococcal vaccine.
- Get vaccinated against hepatitis A. Hepatitis A can further damage your liver.
- Don’t eat raw oysters. They may carry the bacteria Vibrio vulnificus, which can cause serious blood infections in people with liver disease. Approximately 40% of people with this blood infection die.

What can I do to protect others from HBV infection?

People with HBV infection might feel healthy but are still capable of passing the infection on to other people. To protect others from getting HBV infection, it is important to protect them from contact with your infected blood and other infectious body fluids, including semen and vaginal secretions. Sweat, tears, urine, and respiratory secretions do not contain hepatitis B virus. Hepatitis B virus transmission via saliva has only been documented through biting.

Important DOs and DON’Ts for people with chronic HBV infection

**DO:**

- Cover all cuts and open sores with a bandage.
- Discard used items such as band aids and menstrual pads carefully so no one is accidentally exposed to your blood.
- Wash your hands well after touching your blood or infectious body fluids.
- Clean up blood spills. Then re-clean the area with a bleach solution (one part household chlorine bleach to 10 parts water).
- Tell your sex partner(s) you have hepatitis B so they can be tested and vaccinated (if not already infected). Partners should be tested after the three doses are completed to be sure the vaccine worked.
- Use condoms (rubbers) during sex unless your sex partner has had hepatitis B or has been immunized and has had a blood test demonstrating immunity. (Condoms may also protect you from other sexually transmitted diseases.)
- Tell household members to see their doctors for testing and vaccination for hepatitis B.
- Tell your doctors that you are chronically infected with HBV.
- Tell your doctor every 6–12 months to check your liver for abnormalities including cancer.
- If you are pregnant, tell your doctor that you have HBV infection. It is critical that your baby is started on the hepatitis B shots within a few hours of birth.

**DON’T:**

- Share chewing gum, toothbrushes, razors, washcloths, needles for ear or body piercing, or anything that may have come in contact with your blood or infectious body fluids
- Pre-chew food for babies
- Share syringes and needles
- Donate blood, plasma, body organs, tissue, or sperm

What are the long-term effects of HBV infection?

Each year, approximately 5,000 people in the U.S. die of HBV-related liver failure and another 1,500 die from HBV-related liver cancer. HBV infection is the most common cause of liver cancer worldwide and ranks second only to cigarettes as the world’s leading cause of cancer.

Is there a cure for hepatitis B?

As of this writing, there are three FDA-approved medications (interferon, lamivudine, and adefovir) that can help a person who is already infected with HBV. Their use is reserved for people who have certain blood test abnormalities. Be sure to ask your doctor if you are a candidate for treatment or if you might benefit from enrolling in a clinical trial. Researchers continue to seek additional cures for hepatitis B.

Why is hepatitis B so serious in pregnant women?

Pregnant women who are infected with HBV can transmit the disease to their babies. Many of these babies develop life-long HBV infections, and up to 25% will develop liver failure or liver cancer later in life. All pregnant women should be tested early in pregnancy to determine if they are infected with HBV. If the blood test is positive, the baby should be vaccinated at birth with two shots, one of hepatitis B immune globulin (HBIG) and one of hepatitis B vaccine. The infant will need at least two additional doses of hepatitis B vaccine by 6 months of age.

How can hepatitis B be prevented?

The vaccine can provide protection in 90–95% of healthy young adults. The vaccine can be given safely to infants, children, and adults usually in three doses over an approximate 6-month period. Even pregnant women can be safely given these shots if their risk factors warrant it. Hepatitis B shots are very safe, and side effects are rare. Hepatitis B vaccine is our first vaccine that prevents cancer—liver cancer.

(continued on next page)
Adults Only Vaccination: A Step-by-Step Guide
Immunization Action Coalition
www.immunize.org

Appendix B: Patient Materials

To access the current, ready-to-copy version of this piece, visit
www.immunize.org/catg.d/p4090.pdf

Questions Frequently Asked About Hepatitis B

At what age are hepatitis B shots routinely given?
In the U.S., hepatitis B shots are routinely recommended for all children 0–18 years of age. For babies, the first hepatitis B shot is recommended to be given in the hospital at birth. Older children and teens should be vaccinated at the earliest opportunity. Any adult who is at risk for HBV infection should start the vaccine series immediately.

Where can I get hepatitis B shots?
Check with your clinic first. Children’s health insurance usually covers the cost of this vaccine since it is routinely recommended for all U.S. children. If your child is uninsured, ask your local health department for assistance. For adults, contact your health provider first to find out if the vaccine is covered under your health plan. If you are uninsured, call your local health department for advice.

How many shots are needed?
Usually three shots are needed for the best protection against HBV, but some protection is provided from receiving as little as one dose. The shots are usually given on a schedule of 0, 1, and 6 months, but there is great flexibility in the timing of these injections. As with all other vaccines, if you fall behind on the schedule, you just continue from where you left off. Hepatitis B shots will not help or cure a person who is already infected with the hepatitis B virus.

What should I do if I’m in a risk group?
If you are in a risk group for hepatitis B (risk groups are listed on page 1), get vaccinated! All people in risk groups should protect themselves from HBV infection. Every day you delay getting vaccinated increases your chances of getting this highly contagious liver disease. The problems caused by hepatitis B—liver cancer and liver failure—are too great. See your doctor or visit your health department.

How does hepatitis B differ from hepatitis A and C?
Hepatitis A, B, and C are all viruses that attack and injure the liver, and all can cause similar symptoms. Usually, people get hepatitis A from household or sexual contact with a person who has hepatitis A. Hepatitis C, formerly known as hepatitis non-A non-B, is caused by the hepatitis C virus and is spread in much the same way as HBV. Both hepatitis B and C can cause lifelong liver problems while hepatitis A does not. Vaccines to prevent hepatitis A are now available. There is no vaccine yet for hepatitis C. If you’ve had hepatitis A or C in the past, it is still possible to get hepatitis B.

Where can I receive more information about hepatitis B?
Contact your local and state health departments for more information. You can also contact the following organizations:

- Immunization Action Coalition
  Hepatitis B Coalition
  (651) 647-9009
  www.immunize.org
  www.vaccineinformation.org

- American Liver Foundation
  (800) 465-4837
  www.liverfoundation.org

- Centers for Disease Control and Prevention
  (888) 443-7232 Hepatitis Hotline, automated
  (800) 232-2522 Immunization Hotline
  www.cdc.gov/hepatitis
  www.cdc.gov/nip

- Hepatitis B Foundation
  (215) 489-4900
  www.hepb.org

- Hepatitis Foundation International
  (800) 891-0707
  www.hepi.org

- Parents of Kids with Infectious Diseases (PKIDS)
  (877) 557-5437
  www.pkids.org

- Hepatitis B Foundation
  (215) 489-4900
  www.hepb.org

What is the Immunization Action Coalition (IAC)?
The Immunization Action Coalition is a nonprofit organization that works to prevent hepatitis B and all other vaccine-preventable diseases in people of all ages. The Hepatitis B Coalition, a program of IAC, promotes vaccination for children 0–18 years of age, screening for all pregnant women, testing and vaccination for risk groups, and education and treatment for chronically infected people. IAC relies on financial support from the Centers for Disease Control and Prevention, corporations, foundations, health professionals, and other private citizens to maintain its activities. Financial contributions are always needed, greatly appreciated, and tax-deductible.

This article was written in response to more than 5,000 letters sent to Dr. Deborah L. Wexler after she wrote a letter to “Dear Abby” about hepatitis B in 1993. It was updated in September 2003.
To access the current, ready-to-copy version of this piece, visit www.immunize.org/catg.d/p4080a.pdf

**Hepatitis A**

Is a serious liver disease

**Should you be vaccinated?**

If I've been vaccinated against hepatitis B, will this protect me from hepatitis A?

No! Hepatitis B and hepatitis A are different diseases. Hepatitis B vaccine will not protect you from hepatitis A.

What else can I do to prevent hepatitis A?

Washing your hands helps stop the spread of many diseases. Hepatitis A vaccine will not protect you from hepatitis A. Even if you get hepatitis A, your household and sexual contacts will need immunoglobulin and possibly hepatitis A vaccine.

If you become ill with hepatitis A, you need to get medical treatment right away. You need to report your illness to the health department. You should stay home until you're well and follow your doctor's instructions. Your household and sexual contacts will need immunoglobulin and possibly hepatitis A vaccine.

**Keep washing your hands!**

**Everyone needs vaccinations!**

If you can't afford shots or don't know where to get them, call your city, county, or state health department, or call 800-232-2522.
What is hepatitis A?
Hepatitis A is a serious liver disease caused by a virus. Hepatitis A is spread by household or sexual contact with a person who is infected with hepatitis A virus or by eating contaminated food or drinking contaminated water. Over 100,000 people in the United States are estimated to be infected with hepatitis A virus each year.

What are the symptoms of hepatitis A?
Many people who get hepatitis A do not develop symptoms. Only 30% of children under 6 years of age develop symptoms while 70% of people 6 years of age or older develop symptoms.

If a person does develop symptoms, they might include fever, tiredness, loss of appetite, nausea, abdominal pain, dark urine, and/or jaundice (yellow eyes and skin). These symptoms can last up to six months. With or without symptoms, people with hepatitis A virus infection can still spread the disease to others.

How serious is hepatitis A?
Between 11 and 20% of people with hepatitis A require hospitalization. Adults who become ill are often out of work for several weeks. There are approximately 100 deaths each year in the United States from hepatitis A virus infection.

Don't take chances!
Get vaccinated!
Fortunately, there is now a safe and effective vaccine to prevent this serious disease!

Who should get hepatitis A vaccine?
If you fall into any of these groups, you should consult with your doctor or public health clinic about getting vaccinated against hepatitis A.

- people who travel to or work in countries outside of the continental U.S. (Call your local or state public health department to find out the level of hepatitis A risk for your geographic destination.)
- children over two years old who live in communities with high rates of hepatitis A virus infections or in communities with periodic outbreaks of hepatitis A. (For more information, contact your local health department.)
- men who have sex with men
- street drug users
- people with chronic liver disease
- hemophiliacs
- people working with hepatitis A virus in an experimental lab setting
- people with clotting factor disorders

How safe is hepatitis A vaccine?
Research has shown hepatitis A vaccine to be safe and effective. Hepatitis A vaccine has been used in Europe and Asia in over one million people and studied in the United States since the 1980s. Hepatitis A vaccine is approved for use in the United States.

Does the vaccine have side effects?
The most common side effects are mild and may include pain and redness at the injection site. Fever, headache, and tiredness are less common. These symptoms, if they occur, last for only a short time.

How many shots are needed?
Children and adults need two shots of hepatitis A vaccine. 90% of people will be protected after the first shot but you will need the additional shot for long-term protection. Your doctor or nurse will tell you when to return for the next dose. (Hepatitis A vaccine is currently not approved for use in children under 2 years of age.)

What should I do if I think I've been exposed to hepatitis A?
If you think you have been exposed to hepatitis A virus because a household member or a sexual contact developed hepatitis A, consult your physician or health department. You may need a shot called immune globulin that can protect...
If I had hepatitis A in the past, can I catch it again?

No. People who had hepatitis A in the past cannot get the infection again. Up to 45% of U.S. adults 40 years of age and older have already had hepatitis A and do not need to be vaccinated. Only a blood test will tell whether you've had hepatitis A in the past. Consult your physician.

Will hepatitis A vaccine protect me from hepatitis B or hepatitis C?

No. Hepatitis B and hepatitis C are different diseases caused by different viruses. Hepatitis B often occurs in men who have sex with men. There is a vaccine to protect you from hepatitis B. Talk to your doctor. There is no vaccine for hepatitis C.

Where can I receive hepatitis A shots?

Talk to your health care professional or your local public health department.

A special message to travelers...

People who travel to countries outside the continental United States may need hepatitis A vaccine. Consult your health department to find out if you should be vaccinated.

For more information on where to get vaccinated against hepatitis A, call: 651-647-9009.
What is hepatitis A?
Hepatitis A is a highly contagious liver disease caused by the hepatitis A virus.

How serious is hepatitis A?
Between 11 and 20% of people with hepatitis A require hospitalization. Adults who become ill are often out of work for several weeks. There are approximately 100 deaths each year in the United States from hepatitis A.

How great is my risk for getting hepatitis A?
Hepatitis A infects over 100,000 people in the United States each year. Persons who have multiple sex partners or who practice anal pleasuring such as rimming (licking around the anal area) or fingering are more likely to acquire hepatitis A than those who don’t participate in these sexual practices.

How do I protect myself from hepatitis A?
• Get vaccinated! Two hepatitis A shots will protect you from this disease.
• When rimming, use a barrier such as a condom cut in half and lay it over the anus.
• Wash your hands immediately after touching a used condom or fingering your partner’s anal area.
• Tell your friends at risk to get vaccinated with hepatitis A vaccine.

How is hepatitis A spread?
Hepatitis A virus is found in the fecal matter (shit) of an infected person. The disease is usually transmitted from a piece of fecal material that is too small to be seen. It is easily spread by household or sexual contact with a person who is infected with hepatitis A. It is also transmitted by eating contaminated food or drinking contaminated water.

Two shots will protect you against hepatitis A!

Are men who have sex with men at high risk for hepatitis A?
Hepatitis A is easily spread through sexual practices involving the anus. Persons who engage in sexual activities such as rimming and fingering put themselves at increased risk. You can’t tell who is contagious just by appearances.

What are the symptoms of hepatitis A?
• extreme tiredness, muscle weakness
• pain in joints
• loss of appetite, nausea
• fever
• dark-colored urine
• bloated and tender belly
• yellowish tinged skin and eyes

About 7 out of 10 adults who get hepatitis A will develop symptoms. These symptoms can last up to six months. With or without symptoms, people with hepatitis A infection can spread the disease to others.

What should I do if I think I’ve been exposed to hepatitis A?
If you think you have been exposed to hepatitis A because a sexual contact or household member developed hepatitis A, consult your physician or health department. You may need a shot called immune globulin that can give you immediate protection after having been exposed to hepatitis A. You may also need hepatitis A vaccine for future protection.
How do I know if I’ve already been infected?
The only way to know if you’ve been infected is to have your blood tested.

Should I have a blood test before I start the hepatitis B vaccine series?
Talk to your doctor about whether you need this testing. Most people do not need a blood test. If you and your doctor decide you need testing, start the vaccine series at the same visit. That way you will be closer to being protected from HBV.

Will hepatitis B vaccine protect me from hepatitis A or hepatitis C?
No. Hepatitis A and hepatitis C are different diseases caused by different viruses. There is a vaccine for hepatitis A but there is no vaccine for hepatitis C. For information on hepatitis A and hepatitis C, talk to your doctor or your local health department.

What if I can’t afford these shots?
Sometimes these shots are available at no charge through clinics or health departments. Call your clinic or local health department for details. And, while you’re at it, find out what other vaccinations you need, too!

Everyone needs vaccinations!
If you can’t afford shots or don’t know where to get them, contact your city, county, or state health department, or call 800-232-2522.

Get protected! Get vaccinated!

Immunization Action Coalition
1573 Selby Avenue, Suite 234
St. Paul, MN 55104
651-647-9009
www.immunize.org

The text in this brochure was reviewed for technical accuracy by the Centers for Disease Control and Prevention. It is copyright free. Feel free to alter it to fit your clinic or community’s needs. However, if you do alter it, please acknowledge that it was adapted from the Immunization Action Coalition.
What is hepatitis B?
Hepatitis B is a sexually transmitted disease. It is a liver infection caused by the hepatitis B virus (HBV). HBV is spread much like HIV, the virus that causes AIDS. HBV is found in the blood, semen, and vaginal secretions of an infected person. HBV is easier to catch than HIV because it is over 100 times more concentrated in an infected person’s blood.

How serious is hepatitis B?
HBV can cause severe liver disease, including liver scarring (cirrhosis) and liver cancer. Over 6,000 people in the United States die every year from hepatitis B-related liver disease. Fortunately, there is a vaccine to prevent this disease.

How great is my risk of getting HBV infection from sex?
If you answer “yes” to any of the following questions, you are at risk for hepatitis B virus infection and need to be vaccinated!

Is sex the only way I can get HBV?
No. HBV is a sexually transmitted disease, but it is spread in other ways, too. It is a hardy virus that can exist on almost any surface for up to one month. HBV can be spread by:

- unprotected vaginal or anal sex
- sharing needles or paraphernalia (works) for illegal drug use
- contact with open sores
- living in a household with a person with long-term HBV infection
- body piercing (including ear piercing) or tattooing with unsterile equipment
- sharing toothbrushes, razors, nail clippers, or washcloths
- human bites

You do not get hepatitis B virus infection from sneezing, coughing, dry lip kissing, or holding hands.

How do I protect myself from HBV?
Get three hepatitis B shots. The shots are usually given over a period of six months.

Three shots will protect you from HBV!

Tell your sex partner(s) to get vaccinated, too. There are very few STDs you can be vaccinated against so always follow “safer sex” practices.

What are the symptoms of HBV?
Only about half of the people who are infected with HBV get symptoms. Symptoms might include:

- loss of appetite
- nausea
- fever
- dark-colored urine
- yellow-tinged skin and eyes
- extreme tiredness
- pain in joints
- bloated and tender belly

Do people fully recover from HBV?
Most people who get HBV as adults will fully recover. However, approximately 6% will remain infected and will carry HBV in their bodies for life and can still spread the virus to others. People who stay infectious do not necessarily look or feel ill, but they are at increased risk for liver failure and liver cancer and need ongoing medical care.

HBV infects one out of every 20 people living in the United States.
If you have sex, read this . . .

And stop a killer STD from sneaking up on you!

This article, written by Lynda Liu, is reprinted from Mademoiselle, February 1999

Just a few months after she graduated from college, 22-year-old Wendy Marx began to feel so bone-tired that she could barely make it to her brand-new job as an office manager at a San Francisco marketing firm. She ate little or no food and became nauseated when she did force down a meal. Still, it wasn’t until a coworker pointed out that her eyes were slightly yellowish that she finally saw a doctor. Blood tests revealed that she had hepatitis B, a potentially deadly liver infection.

Wendy was admitted to the hospital, but the virus was already out of control, attacking and killing her liver cells. As a last-ditch effort, doctors tried an experimental drug; it failed. Toxins in her bloodstream—which a normally functioning liver would filter out—caused her brain to swell, and four weeks after she was diagnosed, Wendy slipped into a coma. No one was even suspecting that she could have hepatitis B, a disease that scars the liver.

Silent but Deadly

You may not think of hepatitis B as a sexually transmitted disease (STD), but it’s 100 times more contagious than HIV, and about one in every 20 Americans will be infected at some point in their life. In most adults, the immune system springs into action at the first contact with the virus, killing it before it does any serious damage to the liver, and spurring the body to manufacture antibodies to ward off the disease in the future.

But in 5 to 10 percent of the people infected—more than a million Americans—the disease takes hold despite the immune system’s best efforts. Those people, called chronic carriers, have the disease for life and are more prone to cirrhosis, a life-threatening disease that scars the liver. They also have a 200-times greater chance of liver cancer than people without the disease. A small number of them develop, as Wendy did, acute fulminating hepatitis, an overwhelming vicious version of the infection that can lead to liver failure and death in a matter of weeks.

Hepatitis B is especially dangerous because chronic carriers are likely to have no recognizable symptoms—and so they may never suspect that they’re spreading the disease. And, unfortunately, though medication can help control hepatitis B in some patients, there is no cure.

A Disease That Can Live on a Doorknob

Hepatitis B is classified as an STD because, among adults who get it, it’s transmitted through unprotected sex, says Deborah Wexler, MD, executive director of the Immunization Action Coalition in St. Paul, MN. But Wendy Marx was positive that this hadn’t been her mistake; nor did she use intravenous drugs or work at a job where she was exposed to blood—other common ways to catch the disease.

Scarily, the answer to Wendy’s mystery may lie in the fact that hepatitis B can survive for up to a month outside the body, on surfaces such as door knobs and tabletops (and, yes, toilet seats). The virus is transmitted through body fluids—like semen, vaginal secretions, and blood—and it’s extremely unlikely that a toilet seat poses any danger, says Dr. Wexler. But, theoretically, you could contract the disease by touching a door-knob that harbored the virus and then rubbing your eye with your hand. (She emphasizes that it’s a remote possibility.) The far more dangerous culprits are personal items like toothbrushes and razors, which might come in contact with infected blood.

Protection by Injection

There’s reassuring news, however: “Hepatitis B is entirely preventable,” says Henry C. Bodenheimer, Jr., MD, medical director of liver diseases at the Recanati Miller Transplantation Institute at Mt. Sinai Medical Center in New York. An effective vaccine can be given in three shots over six months. Some insurance companies will cover the cost, around $200. [Editor’s note: This was a typical price in 1999; the price may be lower now.] Dr. Wexler says that, for sexually active young women, the vaccine “is an excellent insurance policy” against hepatitis B. (But it doesn’t mean saying so long to safe-sex practices, both she and Dr. Bodenheimer point out; plenty of other STDs are lurking.)

For Wendy Marx, it was far too late for a vaccine. Her failed liver had to be replaced by a transplant. And since hepatitis B can’t be cured, the virus was still in her system, causing damage. Two years later, the transplanted liver failed, too. Wendy, now 31, was lucky—she got a second transplant and now her life seems relatively normal. “I go to the gym. I have a boyfriend.” But she also lives with the possibility that the hepatitis could flare up yet again.

“My, you don’t want to go through what I’ve been through,” she says. “It’s a hell of a lot easier to get the three shots. My life would be entirely different if I had.”

www.immunize.org/czag.d/4113sex.pdf

This article reflects the opinions of the author and does not necessarily represent the views of the Immunization Action Coalition.
If you have chronic hepatitis B virus (HBV) infection...

If you have chronic hepatitis B virus infection (HBV), you are not alone. Today, approximately 1.25 million people in the United States are chronically infected with HBV. The majority of infected people feel healthy for their entire lives and do not demonstrate any evidence of ongoing liver damage. Other people progress to levels of more severe disease. Some people ultimately develop liver scarring (cirrhosis), liver failure, or liver cancer. It is important that you take care of yourself. And because it is possible to spread HBV to others, you have to know how to protect your family, friends, and others from this disease.

How you can take care of yourself
People who have chronic HBV infection need regular monitoring of their liver condition to determine whether their disease is progressing, whether treatment is needed, or whether a liver cancer is developing. Make sure you do the following:

• See your doctor for evaluation of your liver’s condition once or twice a year. Certain blood tests need to be performed periodically to monitor your liver’s health. Discuss with your doctor if you are a candidate for the medications interferon alfa-2b, lamivudine, or adefovir dipivoxil. These medicines are given to certain people with chronic liver disease.

• Discuss with your doctor about getting periodic ultrasounds, alpha-fetoprotein blood tests, or other studies to make sure there is no evidence of a developing liver cancer. Physicians may recommend different schedules for ultrasounds and blood tests depending on the patient’s age, sex, ethnicity, age at which the infection was initially acquired, family history, HBeAg status, and liver enzymes. Usually, ultrasounds and blood tests are recommended every six to 12 months.

• Review with your physician all medications you take. Even some “over-the-counter” medications can injure your liver.

• If you are pregnant, tell your physician that you have chronic HBV infection. It is essential that your baby be given hepatitis B immune globulin (HBIG) and started on hepatitis B vaccine within 12 hours of birth.

• Avoid alcoholic beverages. Alcohol can damage your liver.

If your liver disease has progressed...
If your liver disease progresses, here are some extra precautions you should take:

• Get your yearly influenza vaccine. People with severe liver disease should also receive pneumococcal polysaccharide vaccine.

• Get vaccinated against hepatitis A. Hepatitis A can further damage your liver.

• Don’t eat raw oysters. Raw oysters may carry the bacteria Vibrio vulnificus which can cause a serious blood infection in individuals with liver disease. Approximately 40% of these cases are fatal.

How to protect others from HBV infection
People can get HBV infection from you by coming in contact with your blood, serum, semen, or vaginal fluids. HBV has also been transmitted by human bites. Although HBV has been detected in low concentrations in other body fluids, including tears, sweat, urine, feces, and breast milk, these fluids have not been associated with transmission. Fortunately, HBV is not spread by sneezing or coughing, or from casual contact such as holding hands. Here are some important guidelines for you to follow so that others are protected:

• Tell your sex partner(s) that you are infected with HBV. Your sex partner(s) must see a physician for hepatitis B blood testing. If, according to the blood tests, your partner has never had hepatitis B, he or she should be vaccinated. After the series of three shots is completed, your partner needs to return to the doctor for blood testing to make sure the vaccine protected him or her. Use condoms until your partner is proven to be protected from HBV.

• Make sure all household members see their physicians for hepatitis B testing and vaccination.

• Tell your health care providers that you are infected with HBV.

• Cover all cuts and open sores with a bandage.

• Throw away used personal items such as toothbrushes, razors, and other “counter” medications. Be sure your family is aware of the hepatitis B vaccines.

More resources...
If you have further questions, contact one of these trusted resources:

Immunization Action Coalition
(651) 647-9009
www.immunize.org

American Liver Foundation
(800) 665-8387
www.liverfoundation.org

Centers for Disease Control
and Prevention
(888) 443-7232
www.cdc.gov/hepatitis

Hepatitis B Foundation
(215) 489-4900
www.hepb.org

Hepatitis Foundation International
(800) 891-0707
www.hefpi.org

National Digestive Diseases Information Clearinghouse
(301) 535-7080
www.niddk.nih.gov

Parents of Kids with Infectious Diseases (PKIDS)
(877) 557-5437
www.pkids.org
Are You at Risk for Hepatitis A?

The following questions will help us determine your risk for hepatitis A virus infection. Please check the boxes that apply to you. If you prefer not to answer personal questions in writing, let your health care provider know if one or more of the following risk factors applies to you. Your health care provider will advise you on hepatitis A testing and vaccination.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
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<tbody>
<tr>
<td>1. Do you believe you’ve been exposed to hepatitis A in the past 2 weeks?</td>
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<td>2. Have you ever been told you have hepatitis or liver disease?</td>
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<td>3. Do you travel or work in areas outside the United States where hepatitis A is a problem? (This includes everywhere except Australia, New Zealand, Northern and Western Europe, Japan, and Canada.)</td>
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<td>4. Do you have a blood clotting factor disorder?</td>
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<td>5. Do you live in a community where cases of hepatitis A are occurring?</td>
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<tr>
<td>6. Are you a Native American or an Alaska Native?</td>
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<tr>
<td>7. Do you live or work on a reservation?</td>
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<td>8. If you are a man, do you have sex with other men?</td>
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<tr>
<td>9. Do you engage in anal pleasuring with your partner (licking or fingering the anus)?</td>
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<td></td>
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<tr>
<td>10. Do you inject or snort illegal drugs?</td>
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Identification number: _______________________________    Today’s date: ___/___/___

Item #P2190 (3/01)

Immunization Action Coalition • 1573 Selby Avenue • St. Paul, MN 55104 • (651) 647-9009 • www.immunize.org
To access the current, ready-to-copy version of this piece, visit www.immunize.org/catg.d/2191hepb.pdf

Are You at Risk for Hepatitis B?

The following questions will help us determine your risk for hepatitis B virus infection. Please check the boxes as they apply to you. If you prefer not to answer personal questions in writing, let your health care provider know if one or more of the following risk factors applies to you. Your health care provider will advise you on hepatitis B testing, vaccination, and/or treatment.

Identification number: _______________________________    Today’s date:  ____/____/____ (mo.) (day) (yr.)

1. Have you ever been told you have hepatitis? ……………………………………………………………… ☐ ☐ ☐
2. Have you traveled or do plan to travel for 6 months or more to a place where hepatitis B is common (Asia, Africa, Middle East, Eastern Europe, Amazon Basin of South America, Pacific Islands)? …………………………………………………………………… ☐ ☐ ☐
3. Were you or your parents born in an area of the world where hepatitis B is common, or are your parents Alaska Natives? ……………………………………………………………………………… ☐ ☐ ☐
4. Was your mother infected with hepatitis B virus when you were born? ……………………….. ☐ ☐ ☐
5. Have you ever lived with a person who has hepatitis B virus infection? ………………………. ☐ ☐ ☐
6. Have you come in direct contact with the blood of another person? ……………………………. ☐ ☐ ☐
7. Have you worked in health care or another occupation where you might have come in contact with someone else’s blood or body fluids? ………………………………………… ☐ ☐ ☐
8. Have you provided services for or lived in a home for people with developmental disabilities? ……………………………………………………………………………………………………………………………………………… ☐ ☐ ☐
9. Do you have hemophilia, have you had kidney dialysis, or did you receive a blood transfusion prior to 1975? …………………………………………………………………………………………………………………………………………………………………… ☐ ☐ ☐
10. Have you ever had a tattoo or body piercing? …………………………………………………………….. ☐ ☐ ☐
11. Have you ever been in prison? …………………………………………………………. ☐ ☐ ☐
12. Are you concerned that you might have been exposed to a sexually transmitted disease? ☐ ☐ ☐
13. Have you or your sex partner ever had a sexually transmitted disease or hepatitis B? ………. ☐ ☐ ☐
14. Have you had more than one sex partner during a six-month period? ……………………………. ☐ ☐ ☐
15. Are you a man who has sex with other men? ………………………………………………………….. ☐ ☐ ☐
16. How many sex partners have you had in your lifetime?
   0 1 2 3–5 6–20 more than 20 ☐ ☐ ☐
17. Have you or your sex partner ever injected illegal drugs? ………………………………………. ☐ ☐ ☐
18. Have you ever shared equipment (needles, syringes, cotton, water, etc.) when injecting drugs with someone else? ……………………………………………………………………………………………………………………………………………………………………………… ☐ ☐ ☐
19. Have you ever been vaccinated against hepatitis B? If so, when? ………………………………. ☐ ☐ ☐

Item #P2191 (10/01)
## Are You at Risk for Hepatitis C?

The following questions will help us determine your risk for hepatitis C virus infection. Please check the boxes as they apply to you. If you prefer not to answer personal questions in writing, let your health care provider know if one or more of the following risk factors applies to you. Your health care provider will advise you on hepatitis C testing and/or treatment.

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<tbody>
<tr>
<td>1.</td>
<td>Did you receive a blood transfusion or solid organ transplant (heart, lung, liver, pancreas, kidney) before July 1992?</td>
<td>No</td>
</tr>
<tr>
<td>2.</td>
<td>Did you receive clotting factor concentrates produced before 1987?</td>
<td>No</td>
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<td>3.</td>
<td>Were you ever on long-term hemodialysis?</td>
<td>No</td>
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<td>4.</td>
<td>Have you had blood tests that showed a liver problem?</td>
<td>No</td>
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<td>5.</td>
<td>Have you had a needlestick injury working in a health care setting?</td>
<td>No</td>
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<td>6.</td>
<td>Did your mother have hepatitis C when you were born?</td>
<td>No</td>
</tr>
<tr>
<td>7.</td>
<td>Have you shared a toothbrush, razor, or any other item that might have blood on it (visible or not) with a person who has hepatitis C?</td>
<td>No</td>
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<tr>
<td>8.</td>
<td>Have you had a sex partner who has hepatitis C?</td>
<td>No</td>
</tr>
<tr>
<td>9.</td>
<td>Have you or your sex partner had a sexually transmitted disease?</td>
<td>No</td>
</tr>
<tr>
<td>10.</td>
<td>Have you or your sex partner injected illegal drugs, even if it was only one time many years ago?</td>
<td>No</td>
</tr>
</tbody>
</table>

Identification number: _______________________________    Today's date:  ____/____/____ (mo.) (day) (yr.)

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