HIV and Hepatitis A (HAV)

Hepatitis A is caused by the hepatitis A virus (HAV). HAV is spread when someone ingests contaminated food or liquid or when the feces of someone with the virus gets into another person’s mouth. There are a number of ways that this can happen:

- Eating food—particularly food that is raw or not thoroughly cooked (shellfish, for example)—that has been handled or prepared by someone who has hepatitis A.
- Drinking water or ice that is contaminated with feces.
- Close personal contact with a person who is infected with the virus.
- Engaging in oral-anal sex (“rimming”) with someone who has hepatitis A.
- Using contaminated water for intravenous drug use.

Hepatitis A is an acute form of hepatitis, meaning that it does not cause long-term (chronic) infection. If you have had hepatitis A once, you cannot be infected with the virus again. However, you can still be infected with other hepatitis viruses (hepatitis B virus and hepatitis C virus, for example).

People with HIV are not at greater risk of becoming infected with HAV than anyone else. However, some studies suggest that people with HIV are more likely to experience prolonged symptoms of hepatitis A, meaning that it might take longer for someone who is living with HIV to recover fully from hepatitis A.

Another important issue to consider is that many people with HIV are taking antiretroviral medications that can be toxic to the liver. Some of these medications can make symptoms of hepatitis A worse. In turn, it might be necessary to stop all antiretrovirals until the hepatitis A has run its course or until liver enzyme levels have returned to normal. If you are HIV-positive, are taking antiretroviral medications, and develop hepatitis A, do not stop your antiretroviral medications without first discussing it with your doctor.

What are the symptoms?
Not everyone who is infected with HAV will experience noticeable symptoms. For example, many babies and young children infected with HAV do not experience any symptoms of infection. Symptoms are much more likely to occur in older children, adolescents, and adults.
Symptoms of hepatitis A (and acute hepatitis in general) can include:

- Yellowing of the skin and whites of the eyes (jaundice)
- Feeling tired and rundown (fatigue)
- Pain in the upper-right abdomen
- Loss of appetite
- Weight loss
- Fever
- Nausea
- Diarrhea
- Vomiting
- Dark urine and/or pale stool
- Joint pain

HAV infection can also cause enzymes produced by the liver to increase above normal levels in the bloodstream. The most important liver enzymes are alanine aminotransferase (ALT) and aspartate aminotransferase (AST). Elevated enzyme levels indicate that the liver is not functioning properly and that there may be a risk of permanent liver damage. With hepatitis A, liver enzyme levels can be temporarily elevated, but this rarely leads to long-term liver problems. Both of these enzymes are measured as part of a standard Chem-Screen (CS) Test, which people on antiretroviral treatments usually have done on a regular basis, along with their other blood tests.

It can take the immune system up to eight weeks to clear HAV from the body. If symptoms occur, they usually do so within two to four weeks after being infected. The symptoms of hepatitis A can last anywhere from a week to more than a month. Approximately 15 percent of people with hepatitis A experience symptoms that last between six to nine months.

About one out of 100 people infected with HAV may experience a quick and severe (fulminant) infection, which—very rarely—can lead to liver failure and death.

How is it diagnosed?
Hepatitis A can be diagnosed using blood tests. Your health care provider can order these tests if you have symptoms of hepatitis A or if you want to know if you were infected with HAV in the past.

The blood test looks for two different types of antibodies to the virus. First it looks for IgM antibodies, which are produced by the immune system five to ten days before symptoms appear and usually disappear within six months. It also looks for IgG antibodies, which replace IgM antibodies and protect against future HAV infection.
If the blood test shows that you are negative for both IgM and IgG antibodies, you probably have never been infected with the virus and should consider getting the HAV vaccine.

If you are positive for IgM antibodies and negative for IgG antibodies, HAV infection most likely took place within the past six months and is either in the process of being cleared by the immune system or getting worse.

If you are negative for IgM antibodies and positive for IgG antibodies, either you were infected with HAV some time in the past or you have been vaccinated against hepatitis A; in either case, you are now immune to the virus.

How is it treated?
The usual treatment for hepatitis A is bed rest. It is also important to drink plenty of fluids, particularly if you are experiencing diarrhea or vomiting. Over-the-counter pain relievers, such as ibuprofen (Advil, Motrin, etc.), can help manage some of the symptoms of hepatitis A, although it’s best to consult with your health care provider before using any medications.

If you have not been vaccinated but you were recently exposed to hepatitis A, talk to your doctor about receiving hepatitis A postexposure prophylaxis. This must be done as soon as possible, and no longer than two weeks after exposure.

- Healthy people who are 12 months to 40 years-old receive a single-antigen hepatitis A vaccine.
- Adults over age 40 receive an injection of immune globulin (also called gamma globulin).
  Immune globulin contains high levels of antibodies to HAV, which can help prevent the disease if you have been exposed to the virus. People who receive immune globulin to prevent active hepatitis A should also receive the hepatitis A vaccine.
  - Immune globulin is recommended for children under 12 months, immunocompromised people, those with with chronic liver disease, and anyone who is allergic to the hep A vaccine.

How can it be prevented?
The best way to prevent hepatitis A is to be vaccinated. Two HAV vaccines are available: Havrix and VAQTA. Both of these vaccines require two injections, usually administered six months apart. If side effects from the hepatitis A vaccine occur, they are usually mild and may include soreness at the injection site and mild flu-like symptoms. A combination vaccine for HAV and hepatitis B virus (Twinrix) is also available.

The U.S. Centers for Disease Control and Prevention recommends routine hepatitis A vaccination for:
• All 1 year-old children.
• Those who may be at risk for hepatitis A-related complications.
• People who are at risk for infection or who want protection against hep A.

Hepatitis A vaccination is specifically recommended for:

• Anyone who has come in to direct contact with someone who has hepatitis A.
• Adults and children traveling to or working in countries with high or intermediate prevalence of hepatitis A, such as those in Central or South America, Mexico, Asia, Africa and Eastern Europe.
• Children and adolescents up to age 18 who live in states or communities where routine vaccination has been implemented because of high disease rates.
• Men who have sex with men.
• People using street drugs.
• Anyone with an occupational risk for hepatitis A.
• Persons with chronic liver disease, such as hepatitis B or hepatitis C.
• People who are treated with clotting factor drugs.

The HAV vaccine is very effective. More than 99 percent of people who are vaccinated develop immunity against the virus and will never get HAV even if they are exposed to it. There is some concern that people with HIV with suppressed immune systems are less likely to benefit from the vaccine, so it is best to get the vaccine when CD4-cell counts are within healthy ranges.

If you do not think you were ever infected with hepatitis A, talk to your health care provider about the vaccine. Because people with HIV often experience worse symptoms of HAV infection and the liver plays such an important role in breaking down anti-HIV medications, the hepatitis A vaccine is strongly recommended for people with HIV. Getting vaccinated is especially important for people who are also infected with hepatitis B or hepatitis C.

Even if you haven’t been vaccinated against hepatitis A, there are things you can do to prevent HAV infection:

• Avoid water that could be contaminated with fecal matter.
• Avoid undercooked or raw shellfish.
• Always wash your hands with soap and water after using the bathroom, changing a diaper, and before preparing and eating food.
• Use a latex barrier—such as a dental dam—for oral-anal sex ("rimming").