You'll have a number of routine tests to monitor your health as part of your HIV care. If you're taking HIV treatment, you'll also have regular tests to see how well this treatment is working and to make sure you are not developing any unwanted side-effects.

The health of your liver should be regularly checked by your doctor. Having a healthy liver is important to everybody, but it is particularly important for people with HIV as the liver plays a key role in breaking down and processing medicines used to treat HIV and other infections.

Some anti-HIV drugs can cause side-effects that affect the liver and if you are taking them, your doctor will want to check to see if your liver is suffering any ill-effects because of them.

The health of your liver can also be damaged by a number of things, for example, drinking too much alcohol, using recreational drugs, your diet, taking large doses of vitamin A, and some herbal and alternative remedies. Regular liver function tests can help identify problems early.

Progressive damage to the liver can lead to severe scarring of the liver. This is also known as cirrhosis.

Hepatitis

Some people living with HIV also have one or both of the viruses that cause hepatitis.
B and hepatitis C. Blood tests are available to see if you have these infections, and you should be tested soon after your diagnosis with HIV, and then at regular intervals if you are at risk of acquiring them. Monitoring the health of the liver can also help detect the presence of these viruses. In some cases, hepatitis B or hepatitis C infection is only detected because of abnormal liver function tests.

Hepatitis B and hepatitis C can make you ill and if you have either or both of them the health of your liver will need to be carefully monitored.

You can find out more about hepatitis in our HIV & hepatitis booklet (see www.aidsmap.com/booklets)

**Blood tests**

The British HIV Association (BHIVA) recommends that people living with HIV should have regular assessments of their liver function.

The range of tests you’ll have will check levels of enzymes in your liver. These include:

- Alanine aminotransferase (ALT).
- Aspartate aminotransferase (AST).
- Alkaline phosphatase (ALP).
- Gamma glutamyl transferase (GGT).
- Bilirubin.
- Albumin.

You should have your liver function checked when you are first diagnosed with HIV, at each of your routine HIV clinic appointments and if you become ill.

Liver problems can be a side-effect of a number of anti-HIV drugs. These include the non-nucleoside reverse transcriptase inhibitor, nevirapine (*Viramune*), some protease inhibitors and, more rarely, efavirenz (*Sustiva*, also in the combination pill *Atripla*).

Atazanavir (*Reyataz*) can increase the amount of bilirubin in your blood. This is not because of liver damage but as a result of interference with the liver handling of bilirubin. In some people, this can cause a yellowing of the skin and the whites of the eyes, but this is not harmful. Although this side-effect is not dangerous, it can be distressing for some people.

**Physical tests of liver function**

Your liver is in the upper right-hand side of your abdomen, and your doctor might perform a physical examination to check on its health. This will involve pressing on the liver to see if it is enlarged or painful. These symptoms can indicate that the liver is inflamed, scarred or swollen. Yellowing of the skin and eyes, often called jaundice, may indicate that the liver isn’t working as it should.
"Regular liver function tests can help identify problems early."

The liver infections hepatitis A, hepatitis B and hepatitis C as well as other liver diseases can cause your urine to become very dark and your stools to become pale. You may be asked to provide samples for testing in a lab.

**Ultrasound**

If your doctor suspects that your liver has been damaged, then they may request tests such as an ultrasound. A sensor is placed on the belly and uses sound-waves to create an image of the liver. This will show up any abnormalities of the liver and can sometimes show evidence of scarring (cirrhosis). This procedure is painless and non-invasive and very similar to the ultrasound scan women have during pregnancy.

**Liver biopsies and scans**

Sometimes, the only reliable way to determine the health of the liver is to test a small sample of liver tissue. This is called a liver biopsy. It is usually performed using local anaesthetic. It can be uncomfortable and cause soreness.

New tests are replacing liver biopsies in most cases. These include blood tests (*FibroTest*) and those using echo vibration waves, similar to an ultrasound (*transient elastography*, often using a machine called *FibroScan)*.

**Find out more**

- The liver Simple factsheet
- Hepatitis C Basic leaflet with pictures
- HIV & hepatitis Information booklet