



## Facts At-A-Glance

- Liver cancer is the growth and spread of unhealthy cells in the liver.
- Cancer that starts in the liver is primary liver cancer. Cancer that spreads to the liver from another organ is metastatic liver cancer.
- About 21,000 Americans are diagnosed with primary liver cancer each year.
- Primary liver cancer is one of the few cancers on the rise in the United States.
- Primary liver cancer is about twice as common in men than in women.
- Risk factors for primary liver cancer are other liver diseases (mainly cirrhosis, chronic hepatitis B and chronic hepatitis C).
- Often there are no symptoms of liver cancer.
- Doctors often recommend regular liver cancer screenings for those at increased risk for liver cancer.
- Liver cancer may be diagnosed by a physical examination or by imaging tests.
- Treatment depends on the condition of the liver, the size, location, and number of tumors, if the cancer has spread outside the liver, and the person's age and overall health.



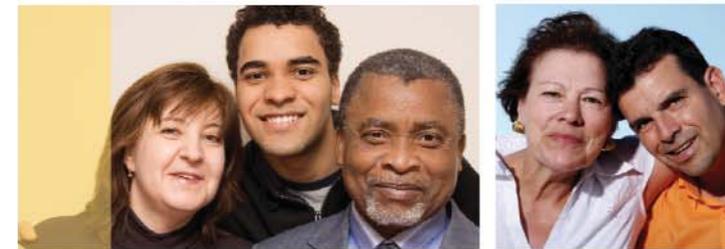
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# Liver **CANCER**



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## Why is the liver important?

The liver is the second largest organ in your body and is located under your rib cage on the right side. It weighs about three pounds and is shaped like a football that is flat on one side.

The liver performs many jobs in your body. It processes what you eat and drink into energy and nutrients your body can use. The liver also removes harmful substances from your blood.

## What is liver cancer?

Liver cancer is the growth and spread of unhealthy cells in the liver. Cancer that starts in the liver is primary liver cancer. Cancer that spreads to the liver from another organ is metastatic liver cancer.

About 21,000 Americans are diagnosed with primary liver cancer each year. Primary liver cancer is one of the few cancers on the rise in the United States. Primary liver cancer is about twice as common in men than in women.

## What causes liver cancer?

There are several risk factors for liver cancer.

- Cirrhosis (scarring of the liver) can lead to liver cancer. In the U.S., chronic alcoholism and hepatitis C are the leading causes of cirrhosis.
- Long-term hepatitis B and hepatitis C infection are linked to liver cancer because they often lead to cirrhosis. Hepatitis B can lead to liver cancer without cirrhosis.
- Obesity may increase the risk of liver cancer.
- Diabetes can increase the risk of liver cancer, especially in those who drink heavily or have viral hepatitis.

## What are symptoms of liver cancer?

Often there are no symptoms of liver cancer until the disease is in an advanced stage. When symptoms do occur, they may include fatigue, bloating, pain on the right side of the upper abdomen

or back and shoulder, nausea, loss of appetite, feelings of fullness, weight loss, weakness, fever, and jaundice (yellowing of the eyes and skin).

## How is liver cancer diagnosed?

Liver cancer may be diagnosed by a physical examination or by imaging tests. To confirm a diagnosis of liver cancer, doctors may use blood tests, ultrasound tests, computer tomography (CT) scans, magnetic resonance imaging (MRI), and angiograms. Your doctor may also need to do a liver biopsy. During a biopsy, a small piece of liver tissue is removed and studied in the lab.

## How is liver cancer treated?

Liver cancer treatment depends on:

- The liver's condition
- The size, location, and number of tumors
- If the cancer has spread outside the liver
- The person's age and overall health

Treatment options if the cancer has not spread and the rest of the liver is healthy are:

### Transplant

If the cancer has not spread, for some patients a liver transplant (replacement of the liver) may be an option.

### Surgery

If the cancer has been found early and the rest of the liver is healthy, doctors may perform surgery to remove the tumor from the liver (partial hepatectomy).

Other treatment options if surgery and transplant are not possible include:

### Cryosurgery

Cryosurgery uses a metal probe to freeze and destroy cancer cells.

### Radiofrequency Ablation

Radiofrequency ablation uses a special probe to destroy cancer cells with heat.

## Ethanol Injection

Ethanol (alcohol) is injected directly into the liver tumor to destroy cancer cells.

## Chemotherapy or chemoembolization

Chemotherapy uses drugs to destroy cancer cells. In some cases, the chemotherapy can be directly injected into the liver tumor.

## Radiation Therapy

Radiation therapy uses radiation (high-energy x-rays) to destroy cancer cells.

## Sorafenib (Nexavar)

Sorafenib is an oral medication FDA approved for use in advanced cases of hepatocellular carcinoma (the most common type of primary liver cancer).

## What is the best way to reduce the risk of liver cancer?

Steps to reduce the risk of liver cancer include:

- Regularly see a doctor who specializes in liver disease
- Talk to your doctor about viral hepatitis prevention, including hepatitis A and hepatitis B vaccinations
- Take steps to prevent exposure to hepatitis B and hepatitis C
- If you have cirrhosis or chronic liver disease, follow your doctor's recommendations for treatment and be screened regularly for liver cancer
- If you are overweight or obese, diabetic, or drink heavily, talk to your doctor about liver health and cancer screenings