



**KAISER PERMANENTE®**

## Cancer of the Liver

Liver cancer can be due to malignant changes in the liver cells themselves—called primary liver cancer—or it can be due to a cancer spreading from another site to the liver—called secondary liver cancer. This message focuses on primary liver cancer, and does not address secondary liver cancer. Cancer that has spread to the liver from another site retains the characteristics and behavior of the original tumor—whether it is breast, colon, pancreatic, stomach, or some other cancer.

In North and South America and in Europe, primary liver cancers account for only one to two percent of malignant tumors. However, in parts of Africa and Asia, they are much more common, accounting for 20 to 30 percent of malignancies. Liver cancer is four times as common in men as in women. In Western countries, it occurs most commonly in people in their 40s and 50s, but in Africa and Asia it may occur one or two decades earlier.

Several factors appear to play a role in causing liver cancer. First, chronic liver disease of any type greatly increases the risk of developing liver cancer. Chronic liver disease may be due to alcohol, viruses such as Hepatitis B or C, or other less common liver diseases. In Africa and Asia, 90 to 95 percent of the people with liver cancer have evidence of infection with Hepatitis B. In addition, breakdown products of certain fungi that can often be found in the food in Africa and Asia may contribute to development of liver cancer.

Finally, hormonal factors may help explain the increased incidence of liver cancer in males. For instance, body builders who use male steroid hormones have an even higher risk than men who do not.

To reduce your risk of liver cancer, don't smoke and only drink in moderation. Smoking and—especially—heavy drinking have been shown to increase the likelihood of developing liver cancer.

In addition, it is now recommended that the following groups of people be vaccinated against Hepatitis B, which increases the long-term risk of liver cancer: all infants; health care workers; people planning to travel to Africa and Asia; and children ages 11 to 19 who live in areas with high rates of drug abuse, teenage pregnancy, and sexually transmitted diseases.

Because liver cancer often occurs in people with underlying liver disease, and because it also has similar symptoms to the underlying disease, it often goes undetected until it's too late. Whether or not you have a liver disease, you should call your health care professional if you notice enlargement of the liver, pain in your right upper abdomen, or if you feel a lump or mass in that area.

To diagnose liver cancer, your health care professional will probably order certain laboratory tests as well as imaging tests such as ultrasound, CT scan, or an MRI. The exact nature of the tumor can be determined only by a biopsy, which is done during surgery or with a needle using X-ray guidance. Options for treatment can include surgery, radiation therapy, or chemotherapy depending on the extent of the cancer and the needs of each individual patient.



For additional health information you can trust:

- Log on to our members-only Web site at [www.kaiserpermanente.org/california](http://www.kaiserpermanente.org/california), then click the "Kaiser Permanente Members Only" button
- Visit your local Kaiser Permanente Health Education Center
- Check your Kaiser Permanente Healthwise Handbook
- Listen to the Kaiser Permanente Healthphone messages at 1-800-33 ASK ME (1-800-332-7563)

To get your free Handbook and Healthphone Directory, call 1-800-464-4000.

The information presented here is not intended to diagnose health problems or to take the place of professional medical care. If you have persistent health problems or if you have additional questions, please consult with your doctor or other health care professional.

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REGIONAL HEALTH EDUCATION