

## What are the symptoms of alcohol-related liver damage?

If the liver is not properly performing its functions, the rest of the body will soon be affected by the lack of nutrients and excess waste products present in the blood. Symptoms and complications arising from liver damage include fatigue, loss of appetite, lowered resistance to infections, jaundice (yellowing of the skin and eyes), swelling of the abdomen, internal bleeding, confusion, and kidney failure.

## Can alcohol-related liver damage be reversed or cured?

If caught early, minimal liver damage can be reversed if a person abstains completely from drinking alcohol. When there is no alcohol in the bloodstream, the liver cells will be able to return to normal because the liver has a tremendous capacity to regenerate itself.

Alcohol-related diseases vary in severity. Anyone who drinks alcohol heavily will develop a condition in which liver cells are swollen with fat globules and water. This condition is called fatty liver and may also result from diabetes, obesity, certain medications, or severe protein malnutrition. Fatty liver caused by alcohol and mild alcoholic hepatitis can be cured when alcohol consumption is stopped.

However, advanced alcoholic hepatitis can result in serious illness. When cirrhosis develops, the structure of the liver is permanently damaged. The symptoms, signs and outcome of cirrhosis depend on its severity and whether or not it is accompanied by severe fatty liver and/or alcoholic hepatitis.

The combination of these forms of alcohol-related liver disease may cause illness, and sometimes, death.

Abstaining from alcohol can be associated with slow, but marked, improvement in the liver function in the majority of patients. Despite complete abstinence, however, up to one third of patients with severe alcohol-related liver disease will continue to develop progressive liver injury. In the presence of severe alcohol-related liver disease, a doctor may introduce a drug therapy. In many cases, these treatments allow people to live normal lives.

---

---

***Look after your liver and if you choose to drink alcohol, have no more than one to two drinks per day. It is important to know that daily consumption of alcohol as well as binge drinking can be harmful to your liver.***

---

---



Since its inception in 1969, the Canadian Liver Foundation (CLF) has been committed to reducing the incidence and impact of liver disease by providing support for research and education into the causes, diagnosis, prevention and treatment of the more than 100 diseases of the liver.

For more information on any liver disease or liver health, please call 416-491-3353 or 1-800-563-5483.

You can volunteer, donate and find more information about the liver at [www.liver.ca](http://www.liver.ca).

This is a rapidly changing field of medicine. Information in this brochure is current for June 2006.

CANADIAN  
LIVER  
FOUNDATION

FONDATION  
CANADIENNE  
DU FOIE

NATIONAL OFFICE

2235 Sheppard Avenue East, Suite 1500  
Toronto, Ontario M2J 5B5  
Tel: 416-491-3353 • Fax: 416-491-4952  
Toll-Free: 1-800-563-5483  
E-mail: [clf@liver.ca](mailto:clf@liver.ca)

**WWW.LIVER.CA**

Canadian Charitable Registration No. 10686 2949 RR0001  
Ce dépliant est également disponible en français.

# ALCOHOL AND THE LIVER



CANADIAN  
LIVER  
FOUNDATION

FONDATION  
CANADIENNE  
DU FOIE

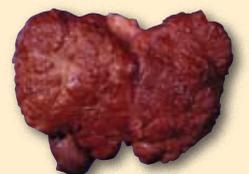
# ALCOHOL AND THE LIVER

## How does alcohol affect the liver?

When the liver has too much alcohol to handle, normal liver function may be interrupted leading to a chemical imbalance. If the liver is required to detoxify alcohol continuously, liver cells may be destroyed or altered resulting in fat deposits (fatty liver), and more seriously, either inflammation (alcoholic hepatitis), and/or permanent scarring (cirrhosis). Liver cancer can also result from alcohol induced liver disease.



Healthy Liver



Cirrhosis  
(Scarring of the Liver)

## What happens when a person has a drink?

Alcohol affects everyone. When a person has a drink, the alcohol is absorbed directly through the wall of the stomach and intestine into the bloodstream, where it is distributed rapidly throughout the body. Women absorb more alcohol from each drink than do men. The alcohol changes the function of each cell that it enters.

The liver processes everything a person ingests, including alcohol. Only a certain quantity of alcohol can be detoxified over a period of time. In the meantime, excess alcohol affects the brain, heart, muscles and other tissues of the body.

## How much alcohol is safe?

This depends on an individual's body weight, gender, etc. For example, women tend to be more susceptible to alcohol-related liver damage.

The Canadian Liver Foundation recommends that alcohol consumption be limited to no more than one to two standard drinks per day. Drinking alcohol every day as well as binge drinking can be harmful to your liver. If you already have a liver disease, you should abstain from alcohol.

## With respect to different types of alcohol, is one safer than another?

No. It is the amount of alcohol present in a drink that matters, not the type of drink.

One "drink" is the equivalent of either:

- 1½ oz. (43 ml) spirits
- 3 oz. (86 ml) sherry or port
- 5 oz. (142 ml) wine
- 12 oz. (341 ml) beer



Each of the above has the same effect on the liver whether taken alone or diluted.

---

## Mixing alcohol and medications may damage the liver.

---



## How does alcohol interact with medication?

Mixing alcohol and medications may damage the liver. Alcohol should not be taken with drugs such as acetaminophen. Many prescribed and over-the-counter medications interact with alcohol, thereby altering the metabolism or effects of alcohol and/or the medication.

Examples of these medications include antibiotics, antidepressants, anti-histamines, barbiturates, benzodiazepines, muscle relaxants, pain and anti-inflammatory medications. Please consult with your health care provider or pharmacist.

## Alcohol and hepatitis C infection

Hepatitis C, which can result in serious and even fatal liver damage, affects thousands of Canadians. Alcohol consumption has proven to increase the rate of liver damage and risk of cirrhosis in people with hepatitis C. Therefore, anyone with hepatitis C, or any other form of chronic liver disease, should abstain from alcohol.

## How do I know if my liver has been damaged by alcohol?

More than three-quarters of liver cells may be non-functioning before you notice any symptoms – but by then it may be too late to do anything about it. So it's important to see your doctor and be honest about your alcohol intake. Through regular physical examinations and blood tests, your doctor will be able to detect early signs of liver disease.