



# EASL

EUROPEAN  
ASSOCIATION  
FOR THE STUDY  
OF THE LIVER

## FACTS AND FIGURES

### The Liver: Vital For Life

The liver is the body's largest internal organ and is essential to life. It performs over 500 different functions for the body:

- processing digested food from the intestine
- controlling levels of fats, amino acids and glucose in the blood
- combating infections in the body
- clearing the blood of particles and infections including bacteria
- neutralising and destroying drugs and toxins
- manufacturing bile
- storing vitamins and minerals
- breaking down food and turning it into energy
- manufacturing, breaking down and regulating numerous hormones
- making enzymes and proteins which are responsible for most chemical reactions in the body e.g. blood clotting

### Liver diseases: Complex and Varied

The liver's complexity makes it susceptible to many different diseases, including among others:

- **Hepatitis** - the most common liver disease which causes inflammation of the liver. It can occur in both viral (e.g. Hepatitis A, B, C, D, E) and non-viral forms (e.g. alcoholic and autoimmune hepatitis) and may result in an acute or chronic condition.
- **Cirrhosis** – the excessive development of scar tissue within the liver which can lead to complete liver failure. This is the result of long-term, continuous damage to the organ.
- **Fatty liver** - covers a range of conditions where there is a build-up of fat in the liver cells. It is caused by certain chemical compounds (particularly alcohol) and by nutritional and endocrine disorders.
- **Liver cancer** - may occur as both primary (cancer that starts in the liver) and secondary (cancer that first develops elsewhere in the body and then spreads to the liver)
- **Genetic diseases** – includes conditions such as Haemochromatosis, Wilson's Disease and Glibert's Syndrome. These diseases are rare (with a prevalence of less than 50 per 100,000 people).

Although the liver is unique in its ability to regenerate it cannot survive continuous damage.

### Liver diseases: Multiple Causes

While liver disease is often associated with alcohol abuse, there are in fact a variety of possible causes, including among others:

- **Viral infections** - the main cause of Hepatitis which occur in a number of different forms:
  - Hepatitis A virus is spread through infected water and food.
  - Hepatitis B virus can be spread by exposure to blood, through sexual intercourse and from mother to baby.
  - Hepatitis C virus is spread mainly by exposure to contaminated blood often through consumption of drugs, tattooing or piercing as well as cuts.
- **Alcohol** – the most common cause of liver damage, leading to conditions such as cirrhosis and hepatitis.
- **Nutrition** – can also cause liver diseases (e.g. “fatty liver”), particularly in overweight people.
- **Drugs and toxins** can affect the liver and lead to cirrhosis or hepatitis.
- **Immune system**
- **Genetic conditions** is the cause of many liver diseases, such as haemochromatosis, Wilson’s Disease, Caroli’s Syndrome, Gilbert’s syndrome etc.

### Liver diseases in Europe

The prevalence of liver diseases is estimated to be approximately 6% in the EU (1) Among the 490 million EU inhabitants, this equates to some 29 million people. Mortality rates from chronic liver diseases across the European region vary widely from 53.6 per 100.000 in Hungary to 4.4 per 100.000 in the Netherlands (2).

Hepatitis, the most common liver disease, is estimated to affect over 10 million people in Europe. The most prevalent are hepatitis B and C, but the incidence (rate of new cases) is increasing in the case of hepatitis C (8.7 per 100,000 compared to 1.5 per 100,000 in the case of hepatitis B) (3). There are estimates of over 8 million people infected with hepatitis C in Europe (4).

The mortality rate for chronic liver diseases was estimated at 14.3 per 100.000 in the EU-25 in 2004, making it the fifth most common cause of death in the EU (5). This means that more than 70,000 Europeans are dying from chronic liver diseases every year.

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### References

1. April 2005, the European Liver Patients Association, <http://www.elpa-info.org/> . Concrete data has proved difficult to compile, reliable figures do exist to present the number of people affected by liver diseases.
2. Source: EU Statistical Yearbook 2006-2007, data from 2004. The EU statistics do not cover all disease of the liver in one category, e.g. alcohol abuse related deaths and liver cancer are treated separately. Therefore, the actual rate of deaths from liver

diseases is higher than the statistics may suggest.

3. Source: EU Statistical Yearbook 2006-2007, data from 2004. ECDC Epidemiological Report on communicable Diseases, May 2007.
4. The WHO estimate of prevalence of Hepatitis C in 1999 is of 1.03% in the European Region. The text, available at [http://www.who.int/immunization/topics/hepatitis\\_c/en/index.html](http://www.who.int/immunization/topics/hepatitis_c/en/index.html), is currently under revision.
5. The EU statistics do not cover all disease of the liver in one category, e.g. alcohol abuse related deaths and liver cancer are treated separately. Therefore, the actual rate of deaths from liver diseases is higher than the statistics may suggest.