

BACKGROUND MEDIA INFORMATION

Fast facts about liver disease

Liver, or hepatic, disease comprises a wide range of complex conditions that affect the liver.

- Liver diseases are extremely costly in terms of human suffering, doctor and hospital visits, and premature loss of productivity¹
- In 2013, 29 million people in the European (EU) region suffered from a chronic liver condition² and more than 30 million Americans had liver disease³

Cirrhosis

Cirrhosis is late-stage liver disease which occurs when scar tissue (fibrosis) replaces healthy tissue.⁴

- Globally, liver cirrhosis was estimated to be responsible for over one million deaths in 2010, which equates to approximately 2% of all deaths worldwide⁵
- It is estimated that in 2013, liver cirrhosis resulted in 170,000 deaths in Europe¹
- Cirrhosis is the leading cause of adult liver transplants in Europe with 58,357 carried out between 1988 and 2013⁶

Liver cancer

Liver cancer begins in the liver and the most common form is hepatocellular carcinoma (HCC), which starts in the main type of liver cells, hepatocytes.⁷

- Worldwide, liver cancer is the sixth most common cancer⁸
 - In 2012, 63,500 new cases of liver cancer were diagnosed in Europe⁹
- Liver cancer is the second most common cause of cancer death worldwide, preceded only by lung cancer. There were 745,000 deaths due to liver cancer in 2012¹⁰
- HCC is one of the most serious outcomes of cirrhosis and is responsible for 70 to 90% of cases of primary liver cancer¹¹
- Non-alcoholic fatty liver disease (NAFLD) associated with HCC is rapidly increasing¹²

Hepatitis

Hepatitis is a viral infection defined by inflammation of the liver.

Hepatitis A

Hepatitis A is caused by the Hepatitis A virus and is most commonly spread by eating food contaminated by the stools of an infected person, and can result in mild to severe illness.¹³

- Globally, there are an estimated 1.4 million cases of Hepatitis A every year¹⁴
- Hepatitis A infection does not cause chronic liver disease and is rarely fatal, but it can cause debilitating symptoms and acute liver failure, which is associated with high mortality¹³

Hepatitis B

Hepatitis B is transmitted through contact with infected blood or other bodily fluids and can result in acute or chronic disease, ranging in severity from a mild condition lasting a few weeks to a serious, lifelong illness.

- An estimated 350 million people worldwide have chronic Hepatitis B¹⁵
- In the World Health Organization (WHO) EU region, it is estimated that 13.3 million people have chronic Hepatitis B.¹⁶ Furthermore, over one million Americans have Hepatitis B³
- Hepatitis B results in an estimated 36,000 deaths every year in Europe¹⁶

Hepatitis C

Hepatitis C is transmitted through contact with infected blood or other bodily fluids, and can result in acute or chronic disease, ranging in severity from a mild condition lasting a few weeks to a serious, lifelong illness.

- Hepatitis C is found worldwide. The most affected regions are Central and East Asia and North Africa¹⁷
 - Egypt has the highest prevalence of Hepatitis C in the world,¹⁸ and an estimated 40,000 people a year are killed by the virus. At least one in ten people aged 15 to 59 are infected¹⁹
- 130 to 150 million people globally have chronic Hepatitis C infection and approximately 500,000 people die each year from Hepatitis C-related liver diseases¹⁷
- In the WHO EU region, it is estimated that 15 million people have Hepatitis C, resulting in approximately 86,000 deaths every year.¹⁶ Four million Americans have Hepatitis C³

Hepatitis D

Hepatitis D is caused by the hepatitis delta virus, and is transmitted through contact with infected blood or other bodily fluids in people who already have Hepatitis B.²⁰

- Hepatitis D is present worldwide and current estimates suggest that 15 to 20 million people have been exposed to the hepatitis delta virus²¹
- Severe Hepatitis D occurs among indigenous people of Venezuela, Colombia, Brazil and Peru, all regions with high chronic hepatitis delta virus infection rates. It is less common in Eastern Asia but is present in Taiwan, China and India²²
- The majority of patients infected with the Hepatitis D virus have a progressive disease which over time eventually evolves into cirrhosis²¹

Hepatitis E

Hepatitis E is caused by the Hepatitis E virus and is mainly transmitted via contaminated water.²³

- Hepatitis E is found worldwide, but the prevalence is highest in East and South Asia²³
- It is usually self-limiting but (like Hepatitis A) it may develop into acute liver failure²³
- Every year there are an estimated 20 million Hepatitis E infections, over three million acute cases of Hepatitis E and 56,600 Hepatitis E-related deaths²³

Liver transplant

A liver transplant is a surgical procedure to remove a diseased liver and replace it with a healthy liver from a donor.²⁴

- It is estimated that approximately 25,000 liver transplants were conducted globally in 2013,²⁵ including an estimated 4,071 liver transplants in the Western Pacific region²⁵
- More than 5,500 liver transplants are performed each year in Europe²⁶
- Based on data from the European Liver Transplant Registry a total of 118,441 liver transplants took place across 28 countries between May 1968 and December 2013²⁶
- In terms of survival post transplantation, more than nine out of ten people are still alive after one year, around eight in every ten people live at least five years, with many people living for up to 20 years or more²⁷

Alcoholic liver disease (ALD)

Alcoholic liver disease is damage to the liver and its function due to alcohol abuse.²⁸

- Alcoholic liver disease is the most prevalent cause of advanced liver disease in Europe²⁹
- ALD is the most common cause of cirrhosis in the Western world and one of the ten most common causes of death³⁰

Non-alcoholic fatty liver disease (NAFLD) and non-alcoholic steatohepatitis (NASH)

NAFLD is fatty infiltrations in the liver not caused by alcohol which can then lead to NASH, a more serious stage of the disease where the liver becomes inflamed due to the accumulation of fat.³¹

- Guidelines published in 2012, by the World Gastroenterology Organisation, suggest the prevalence of NAFLD had doubled over the last 20 years. NAFLD and NASH are both closely associated with diabetes and obesity, and together are considered the number one cause of liver disease in Western countries³²
- NAFLD affects approximately 20% of the population worldwide³³
 - As many as 116 million people in the EU may suffer from some form of NAFLD²
 - Two large European studies reported NAFLD prevalence rates of between 43 and 70% in samples of adults with type 2 diabetes¹¹
 - The estimated prevalence of NAFLD in the Middle East is between 20 and 30%³²
 - Up to 34% of Americans may suffer from some form of NAFLD³²
- Between 10 and 30% of patients with NAFLD have NASH that can progress to cirrhosis³⁴
 - In the USA approximately six million people are estimated to have NASH³²
 - In Europe, prevalence of NASH is approximately 5%³²

Autoimmune, cholestatic and drug-induced liver diseases

Liver diseases that affect bile secretion are termed 'cholestatic' and they can be caused by autoimmune damage of the bile ducts, drugs, genetic defects and developmental disorders. Autoimmune liver diseases may also affect the liver cells (autoimmune hepatitis).

Drug-induced liver disease

- Drug-induced liver injury is the most common cause of acute liver failure in Western countries
- The incidence and seriousness of drug-induced hepatitis are largely underestimated in the general population³⁵

Autoimmune and cholestatic liver disease

- Autoimmune and cholestatic liver diseases are relatively rare compared with viral hepatitis and fatty liver disease, but are associated with a significant societal and economic burden due to scarcity of effective treatment²
- These diseases account for approximately 10% of the liver transplants performed in Europe during the last 20 years²
- The most frequent cholestatic and autoimmune liver diseases are primary biliary cholangitis, primary sclerosing cholangitis, and autoimmune hepatitis³⁶
- Despite recent advances in understanding of the diseases and available treatments, there remain significant areas of unmet clinical need in each of the autoimmune and cholestatic liver diseases³⁷

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