# BACKGROUND MEDIA INFORMATION
# Alcoholic liver disease: A grave concern for Europe

The liver is responsible for breaking down alcohol so that it can be removed from the body. Alcohol can damage or even destroy liver cells and, although the liver can regenerate and repair itself, drinking more alcohol than the liver is able to process can lead to serious damage and loss of function. Alcoholic liver disease or alcohol-related liver disease (ALD) is damage to the liver caused by excessive alcohol consumption, usually taking place over a period of years.

According to the World Health Organisation, Europe is the heaviest drinking region in the world in terms of the prevalence of alcohol consumption; therefore ALD is an important issue for Europe to address.[1]

## Types of alcoholic liver disease

ALD is a complex disease that encompasses a spectrum of conditions, including:[2]

- Simple steatosis (accumulation of fat in the liver)
- Alcoholic fatty liver disease (or alcoholic steatohepatitis)
- Alcoholic hepatitis (inflammation of the liver)
- Cirrhosis (irreversible scarring of the liver)
- Development of liver cancer

While many people who consume more than 60 grams of alcohol a day (equivalent to half a bottle of wine or more than a litre of beer) will develop steatosis, only a minority will go on to develop the more serious condition of alcoholic fatty liver disease and between 10 to 20% will develop cirrhosis.[2] Specific genetic factors have been shown to influence the risk of developing liver disease linked to alcohol consumption.[3]

The consequences of ALD can be grave. Severe alcoholic hepatitis is life-threatening, and people who develop cirrhosis and fail to stop drinking have less than a 50% chance of living for five years.[4]

## Burden of disease

- In 2010, liver cirrhosis, as a result of ALD, was responsible for 493,300 deaths (156,900 female and 336,400 male deaths) worldwide[5]
- Alcohol-attributed liver cancer is responsible for 80,600 deaths, with approximately four times as many deaths in men compared to women[5]
- ALD is the most prevalent cause of advanced liver disease in Europe[2]
- Alcohol consumption is responsible for nearly 7% of all deaths in Europe and 12% of disability-adjusted life-years (DALYs) lost due to premature death from alcohol[2]
- Europe shows particularly large sex differences in ALD burden: deaths attributable to alcohol are 11% for men, yet only 1.8% for women[2]
- Young people also account for a disproportionate amount of ALD disease burden, with over 10% and 25% of alcohol-related deaths in female and male youths respectively[2]
- Trends in liver cirrhosis mortality over the past 30 years vary throughout Europe:[2]
    - About half the European countries (including Austria, France, Germany, Italy, Portugal, Spain, Hungary and Romania) have experienced sharp declines in liver cirrhosis mortality
    - Other countries such as Finland, Ireland, the United Kingdom and a large number of Eastern European countries have increasing rates

## Risk factors

Intake of alcohol is the biggest risk factor for ALD:[6]

- The risk of liver disease increases significantly for men who drink more than 40 grams of alcohol a day for more than 10 years
- The development of cirrhosis is usually associated with consumption of more than 80 grams of alcohol a day for more than 10 years
- People who drink in excess of 230 grams of alcohol a day for 20 years have approximately a 50% risk of developing liver cirrhosis

However, not all chronic alcohol abusers develop liver disease and factors beyond alcohol intake, such as sex, genetic factors and nutrition, are thought to be involved:[6]

- Women are more susceptible to ALD than men, even when body size is taken into account
- ALD often runs in families and therefore genetic causes play a part in its development
- Both obesity and a diet that is high in unsaturated fat are risk factors for ALD
- Other factors, such as infection with the Hepatitis C virus, also play a part in ALD risk

## Management of alcoholic liver disease

- Abstinence from alcohol improves the clinical outcomes of all stages of ALD and is therefore a critical goal for these patients[2]
- First-line therapy for severe alcoholic steatohepatitis includes corticosteroids[2]
- The first complication of alcoholic cirrhosis is typically ascites. Other complications include jaundice, variceal bleeding and hepatic encephalopathy and these patients are particularly prone to bacterial infections[2]
- EASL recommends screening for hepatocellular carcinoma for patients with liver cirrhosis, as well as alcohol-induced damage in organs including the heart, kidney, nervous system and pancreas[2]
- Some patients with acute alcohol-related hepatitis can be treated with liquid food supplements to provide nutrition while helping to reduce inflammation of the liver[7]
- A liver transplant may be considered for patients who have liver failure that has not improved after both treatment and long-term, and alcohol abstinence.[7] The transplant community and transplant hepatologists are currently re-evaluating the guidelines to take into consideration limited resources and scarcity of organ donation
- The most cost-effective policies to reduce harm caused by alcohol are those that reduce the availability of alcohol, either through pricing policies, hours and places of sale, and implementing minimum age purchase laws[2]

## EASL is taking action to address ALD in Europe

EASL is involved in a wide range of public affairs initiatives aimed at raising awareness amongst European decision makers about the need to tackle liver disease in a comprehensive manner. In November 2014, EASL took part in the second Awareness Week on Alcohol-Related Harm, which brought together leading European medical and patient organisations to identify policy gaps relating to alcohol at both European and national levels.

**References**

1 European Association for the Study of the Liver. The Burden of Liver Disease in Europe. Available from: http://www.easl.eu/medias/EASLimg/Discover/EU/54ae845caec619f_file.pdf. Last accessed: March 2016.
2 European Association for the Study of the Liver. EASL Clinical Practical Guidelines: Management of Alcoholic Liver Disease. Available from: http://www.easl.eu/medias/cpg/issue9/Report.pdf. Last accessed: March 2016.
3 Tian C., et al. Variant in PNPLA3 is associated with alcoholic liver disease. Nat Genet. 2010 Jan;42(1):21-3.
4 NHS Choices. Alcohol-related Liver Diseases. Available from: http://www.nhs.uk/Conditions/liver_disease_%28alcoholic%29/Pages/introduction.aspx. Last accessed: March 2016.

5 Jurgen Rhem et al. Global burden of alcoholic liver diseases. Journal of Hepatology. 2013;(59):160-168. Available from: http://www.sciencedirect.com/science/article/pii/S0168827813001840. Last Accessed: March 2016.
6 Merck Mannuals. Alcoholic Liver Disease. Available from: http://www.merckmanuals.com/professional/hepatic_and_biliary_disorders/alcoholic_liver_disease/alcoholic_liver_disease.html. Last Accessed: March 2016.
7 National Institute of Health and Care Excellence (NICE). Alcohol-use disorders: Diagnosis and clinical management of alcohol-related physical complications. Available from: https://www.nice.org.uk/guidance/cg100/ifp/chapter/alcohol-related-liver-disease#treating-acutealcohol-related-hepatitis. Last Accessed: March 2016.