# BACKGROUND MEDIA INFORMATION
# Viral hepatitis: A significant threat to health in Europe

Viral hepatitis is inflammation of the liver caused by a viral infection. There are five main types of hepatitis virus, known as Hepatitis A, B, C, D and E. While Hepatitis A and E are usually contracted by consuming food or water contaminated with the virus, Hepatitis B, C and D are transmitted through contact with infected blood or other bodily fluids. Hepatitis B and C can also be transmitted through sexual contact or passed from mother to child.

Although the five hepatitis viruses and their impact on the human body differ, all can pose a threat to the health of the liver.

**Viral hepatitis kills one million people worldwide each year.[1]**

Viral hepatitis is the most common cause of primary liver cancer, and many of the viral hepatitis deaths are the result of liver cancer.

## Focus on Hepatitis C

### *Background on Hepatitis C*

The Hepatitis C virus was first isolated and discovered in 1989. By the 25th anniversary of its discovery the joint research efforts of hepatologists around the world had led to the identification of a breakthrough cure. These advances in Hepatitis C, from discovery to cure, represent some of the most exciting discoveries in both liver disease and medicine.

The Hepatitis C virus is blood-borne. There is no vaccine for Hepatitis C and prevention is only possible through avoiding contact with contaminated blood. The Hepatitis C virus can cause two types of infection: acute and chronic.

### *Acute Hepatitis C*

In acute infections, the immune system clears the virus from the body without any treatment within six months of acquiring the infection. An acute infection is rarely life-threatening.[2] Between 15 and 45% of people who contract Hepatitis C will spontaneously clear the infection in this way.[2]

### *Chronic Hepatitis C*

Chronic Hepatitis C infection occurs when the body does not spontaneously clear the virus. This is the case for 55 to 85% of people who contract Hepatitis C. Around 15 to 30% of people with chronic Hepatitis C will go on to develop liver cirrhosis and a proportion of these progress to liver cancer.[2]

### *Epidemiology of Hepatitis C*

Hepatitis C causes about 86,000 deaths per year in World Health Organization (WHO) European (EU) Region.[3] Between 130 and 150 million people globally have chronic Hepatitis C infection.[2] It is estimated that 15 million people in the WHO's EU Region are living with Hepatitis C, representing 2% of adults.[4] However, the prevalence among people who inject drugs may be as high as 98%.[3]

### *Treatment for Hepatitis C*

Chronic Hepatitis C can be treated with antiviral therapy to stop the virus from multiplying inside the body, thereby preventing liver damage. Cure rates for Hepatitis C with novel therapies can now reach >90% for the majority of patient groups. These exciting treatments, many of which are still being investigated, are called directly acting antiviral agents (DAAs). They directly and specifically target the Hepatitis C virus in every stage of its lifecycle.

There are different strains (genotypes) of the virus and some respond better to treatment than others. This means that patient management can still pose complex challenges alongside wider patient concerns such as response to previous treatments and the stage of liver disease, which need to be considered. Screening and early diagnosis can increase the chance of successful treatment.[4]

## Focus on Hepatitis B

### *Background on Hepatitis B*

Hepatitis B is a potentially life-threatening liver infection caused by the Hepatitis B virus. It is a major global health problem. It can cause chronic infection and puts people at high risk of death from cirrhosis and liver cancer.[5]

A vaccine against Hepatitis B has been available since 1982. The vaccine is 95% effective in preventing infection and the development of chronic disease and liver cancer due to Hepatitis B.[5]

### *Chronic Hepatitis B*

Chronic Hepatitis B is a leading cause of cirrhosis of the liver and liver cancer worldwide. Children infected with the virus before the age of six are most likely to develop the chronic form of the infection.[5]

### *Epidemiology of Hepatitis B*

Approximately 14 million people within the WHO EU Region are chronically infected with Hepatitis B.[6] Although less than 1% of the population in Western Europe and North America is chronically infected with Hepatitis B, chronic infection is common in some regions of the world. Between 5 and 10% of the adult population in sub-Saharan Africa and East Asia is thought to be chronically infected.

### *Treatment of Hepatitis B*

Current treatments for chronic Hepatitis B are safe and effective but at the moment can only supress the virus, they cannot eradicate it or cure the patient. Hepatitis B, however, can be prevented by vaccination and the WHO recommends that all infants receive the Hepatitis B vaccine as soon as possible after birth.

**References**

1 Horton R. Global Burden of Disease 2010: Understanding disease, injury, and risk. The Lancet 2012 (380) 2053-2054. Available from: http://www.thelancet.com/journals/lancet/issue/vol380no9859/PIIS0140-6736(12)X6053-7. Last accessed: March 2016.
2 World Health Organization. Hepatitis C Fact Sheet N°164. Available from: http://www.who.int/mediacentre/factsheets/fs164/en/. Last accessed: March 2016.
3 World Health Organization. Hepatitis data and Statistics. Available from: http://www.euro.who.int/en/health-topics/communicable-diseases/hepatitis/data-and-statistics. Last accessed: March 2016.
4 World Health Organization. Global Alert and Response – Hepatitis C. Available from: http://www.who.int/csr/disease/hepatitis/whocdscsrlyo2003/en/index3.html. Last accessed: March 2016.
5 World Health Organization. Hepatitis B Fact sheet N°204. Available from: http://www.who.int/mediacentre/factsheets/fs204/en/. Last accessed: March 2016.
6 Hatzakis A et al. The state of hepatitis B and C in Europe: report from the hepatitis B and C summit conference. J Viral Hepat. 2011 Sep;18 Suppl 1:1-16. Available from: http://www.ncbi.nlm.nih.gov/pubmed/21824223. Last accessed: March 2016.