

# Hepatitis C

## Key facts

- Hepatitis C is a liver disease caused by hepatitis C virus (HCV).
- Hepatitis C can lead to both acute and chronic liver infections. A significant number of those who are chronically infected will develop cirrhosis of the liver or liver cancer.
- The common modes of transmission are through unsafe injection practices, inadequate sterilization of medical equipment and use of unscreened blood and blood products.
- Antiviral treatment can successfully cure hepatitis C infection in approximately 90% of persons with hepatitis C infection, but access to these drugs and treatment is low.
- Currently, there is no vaccine available for hepatitis C; however, research in this area is ongoing.

## Disease epidemiology

- Globally, between 130 and 150 million people have chronic hepatitis C infection.
- A majority of those who are chronically infected develop cirrhosis of the liver or liver cancer.
- Approximately 700 000 people die globally each year from hepatitis C-related liver disease.
- Around 15–45% of infected persons recover within 6 months without any treatment and the remaining 55–85% of persons develop chronic HCV infection.
- Between 3 and 6 million people are infected with hepatitis C (HCV antibody positive) in India (1% prevalence).
- HCV genotypes 2 and 3 are most prevalent in India.

## Transmission

- HCV is transmitted through infected blood.
- Common modes of transmission include injecting drug use through the sharing of needles, syringes or other injection equipment; the reuse or inadequate sterilization of medical equipment, especially syringes and needles in health-care settings; and the transfusion of unscreened blood and blood products.
- HCV can also be transmitted sexually and can be passed from an infected mother to her baby; however, these modes of transmission are much less common.

## Symptoms

- Symptoms of acute infection include fever, tiredness, loss of appetite, nausea, vomiting, abdominal pain, dark urine, grey-coloured faeces, joint pain and jaundice.
- Around 80% of persons infected do not exhibit any symptoms at all.

## Diagnosis

- Since acute HCV infection is usually asymptomatic, early diagnosis of the HCV infection is rare.
- Even for those who go on to develop chronic HCV infection, the infection may often remain undiagnosed until serious liver damage has developed.
- Screening for anti-HCV antibodies with a serological test identifies people who have been infected with the virus. Subsequent testing for HCV ribonucleic acid (RNA) is needed to confirm chronic hepatitis C infection.

## At-risk populations

These include:

- People who inject drugs and people who use intranasal drugs.

- Recipients of infected blood products or invasive procedures in health care facilities with inadequate infection control practices.
- People who have had body piercing or tattoos done with non-sterile instruments.
- Health care workers injured by needle sticks and other sharps.
- People with HIV infection.
- Children born to mothers infected with HCV.
- People with sexual partners infected with HCV.
- Prisoners or previously incarcerated persons.

## Treatment

- The standard of care for HCV treatment is changing rapidly. Until recently, hepatitis C treatment was based on therapy with interferon and ribavirin, which required weekly injections for 48 weeks, cured approximately half of treated patients but caused frequent and sometimes life-threatening adverse drug reactions.
- Recently, scientific advances have led to the development of very effective new antiviral drugs for hepatitis C, which are safer and better tolerated than existing therapies. These therapies can cure more than 90% of patients after a shorter period (usually 12 weeks) of treatment.
- However, at present these treatments are still expensive.

## Prevention

- Currently there is no vaccine available for hepatitis C.
- Prevention of HCV infection depends upon reducing the risk of exposure to the virus in health-care settings and in high-risk populations.
- WHO recommends the following key interventions for prevention of hepatitis C transmission:
  - Testing of all donated blood
  - Provision of comprehensive harm-reduction services to people who inject drugs including sterile injection equipment;
  - Infection control and injection safety practices in health facilities (hand hygiene, safe handling and disposal of sharp and waste, and increased use of injection devices with reuse prevention feature).

## WHO response

In May 2016, WHO launched guidelines for screening, care and treatment of persons with hepatitis C infection.

- HCV serology testing should be offered to individuals who are part of a population with high HCV prevalence or who have a history of HCV risk exposure/behaviour.
- Nucleic acid testing (NAT) for the detection of HCV RNA should be performed directly following a positive HCV serological test to establish the diagnosis of chronic infection and to assess whether or not to start treatment for hepatitis C.
- Screening for alcohol use in those that test positive for HCV and behavioural alcohol reduction intervention should be conducted as necessary.
- All adults and children with chronic HCV infection, including people who inject drugs, should be assessed for antiviral treatment.
- All patients with hepatitis C should be treated with DAA-based regimens, except for a few specific groups of people in whom interferon-based regimens can still be used (as an alternative regimen for patients with genotype 5 or 6 infection and those with genotype 3 HCV infection who also have cirrhosis).
- In its latest guidelines, WHO recommends preferred and alternative DAA regimens based on genotype and cirrhosis status.

WHO organizes World Hepatitis Day on 28 July every year to increase awareness and understanding of viral hepatitis.

**World  
Hepatitis Day  
2016**

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