

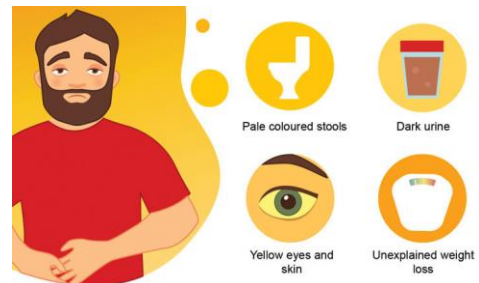
Hepatitis E is also an acute viral disease, generally self-limiting and very rarely subject to chronicization, with clinical characteristics similar to those of hepatitis A. It is estimated that 1/3 of the world population has been exposed to the virus and that every year 20 millions of people acquire the infection, with at least 600,000 deaths each year.

In Italy, in the years 2007-2018 there was a continuous increase in the number of cases of hepatitis E reported to Seieva. During 2019, a real peak was reached with a number of cases doubled compared to the previous year (98 cases compared to 49 in 2018). This increase is an alarm bell and requires careful monitoring of the trend in the coming months. "

**The Hepatitis E virus is acquiring new importance:**

it is an exaggeration to call it a threat, but the disease is proving worthy of attention. Recently a strain of this virus typical of rats has been shown to cause at least a dozen infections in humans in Hong Kong, a further sign, as if they were missing, that the Pandora's box is always full and ready to reserve surprises ", Concludes Professor Galli.

WHAT ARE HEPATITES Viral hepatitis are infectious processes affecting the liver which, despite having similar clinical pictures, differ from the point of view etiological (various viruses responsible for the infection), epidemiological (different distribution and frequency of infection and disease) e immuno-pathogenetic.



World Hepatitis Day photo day oms In Italy, hepatitis is included among the diseases for which mandatory notification is required (Class II, significant diseases because of high frequency and subject to control interventions). To date, 5 types of viral hepatitis are known due to the so-called major hepatitis viruses: HEPATITIS A,

HEPATITIS B, HEPATITIS CHEPATITIS D, HEPATITIS E Currently 325 million people live with the infection and the viruses responsible for hepatitis B and C cause 1.4 million deaths every year. Today one of the main obstacles to the elimination of this disease is the large number of people who live for years with hepatitis, unaware of being affected by it. It is people between the ages of 45 and 60 who are most likely to unknowingly contract viruses.

The risk increases if you have been subjected to other risk factors such as surgery, transfusions, tattoos, etc. Being able to diagnose the infection in unaware people is today the main challenge in the fight against hepatitis.

In order to detect the presence of the hepatitis virus, a simple test is enough, early diagnosis can save several lives. (group of blood tests prescribed together to support the diagnosis of viral hepatitis. Some of these tests detect the antibodies produced by the immune system in response to infection, while others detect the proteins (antigens) of the virus.

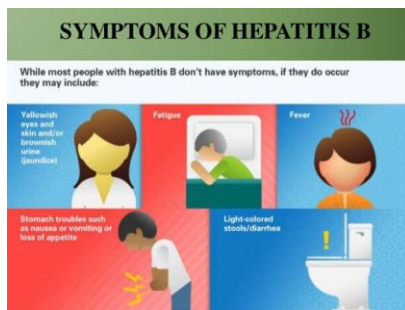
**The hepatitis panel usually includes:**

Hepatitis A IgM antibodies Hepatitis B anti-core IgM antibodies Surface antigen of hepatitis B Anti-hepatitis C antibodies These tests make it possible to diagnose viral hepatitis in people with acute symptoms of hepatitis or at risk of having contracted the infection). Hepatitis C can now be successfully treated and hepatitis B can be prevented with vaccination. camoagna oms image

**HEPATITIS A** The virus responsible for hepatitis A (Hav) has an incubation period ranging from 15 to 50 days and a generally self-limiting and benign course. Asymptomatic forms are also frequent, especially during epidemics and in children. However, sometimes there can be more severe forms with a protracted course and also rapidly fatal fulminant forms.

Generally the disease, which lasts 1-2 weeks, manifests itself with fever, malaise, nausea, abdominal pain and jaundice (YELLOWISH COLOR OF THE SKIN, SCLERAS AND MUCOSA), accompanied by elevations of transaminases and bilirubin. A proportion of infections, especially if contracted at a young age, remain asymptomatic.

Patients recover completely without ever becoming chronic; therefore, there is no chronic carrier of virus A, either in the blood or in the faeces. Transmission occurs via the fecal-oral route. Generally, the infection occurs by direct contact from person to person or through the consumption of water or some raw (or not sufficiently cooked) foods, especially molluscs, raised in water contaminated by sewers containing the virus.



Cases of contagion due to blood transfusions or derived products have only rarely been observed. In Italy, two different vaccines are available that provide protection from infection already after 14-21 days. Vaccination is recommended in those at risk, including those traveling to countries where hepatitis

A is endemic, for those who work in environments in contact with the virus, drug addicts, and family contacts of people with acute hepatitis A. vaccination is also recommended for those suffering from chronic liver disease, as the lethality in these subjects is greater. HEPATITIS B Hbv infection is, in most cases, asymptomatic.

On the contrary, the evolution of the infection into a disease presents insidious onset with abdominal discomfort, nausea, vomiting and sometimes with jaundice accompanied by fever of a live entity. However, only 30-50% of acute infections in adults and 10% in children lead to jaundice. The lethality rate is approximately

**1%, but the percentage increases in people over the age of 40.**

The source of infection are people with acute illness or chronic carriers, in which the virus persists in the blood and other biological fluids, such as saliva, bile, nasal secretions, breast milk, semen, vaginal mucus.

Transmission occurs by apparent parenteral route, that is through transfusions of blood or blood products contaminated by the virus, or by cuts / punctures with infected needles / instruments, sexual and perinatal from mother to child. Furthermore, since the virus resists on environmental surfaces for at least 7 days, the infection can also occur through inapparent parenteral route

(indirect inoculation) or through contaminated vehicles through minimal lesions of the skin or mucous membranes (dental brushes, scissors, combs, razors, bath brushes contaminated with infected blood). At risk, therefore, are drug addicts, those who practice unprotected sex, health workers in contact with infected people or who work in the laboratory in contact with the infectious agent;

family and sexual contacts of infected people are also at risk, and all those practices that involve the use of non-sterilized needles and syringes, such as tattoos, piercings, manicures, pedicures. The incubation period varies between 45 and 180 days, but it is usually between 60 and 90 days.

The vaccine currently in use has been shown to be safe and effective and provides long-lasting immunity. In Italy, vaccination has been compulsory for all newborns since 1991 and, until 2003, it was also compulsory for adolescents at 12 years of age, and strongly recommended for groups of the population at greater risk of infection (drug addicts, cohabitants of chronic carriers, health personnel, etc.).

**HEPATITIS C** The initial acute Hcv infection is in most cases asymptomatic and anicteric. In those who clinically manifest the disease, the onset is insidious with anorexia, nausea, vomiting, fever, abdominal pain and jaundice. Transmission occurs mainly parenterally.

Cases of sexual infection have also been documented, but this route seems to be much less efficient than for HBV. Infection can be transmitted vertically from mother to child in less than 5% of cases. The control of blood donations, through the anti-Hcv antibody test, has significantly reduced the risk of infection following transfusions of blood and blood products.