Hepatitis viruses

Hepatitis is an inflammation of the liver. The condition can be self-limiting or can progress to fibrosis (scarring), cirrhosis or liver cancer. Hepatitis viruses are the most common cause of hepatitis in the world but other infections, toxic substances (e.g. alcohol, certain drugs), and autoimmune diseases can also cause hepatitis.
There are 5 main hepatitis viruses, referred to as types A, B, C, D and E. These 5 types are of greatest concern because of the burden of illness and death they cause and the potential for outbreaks and epidemic spread. In particular, types B and C lead to chronic disease in hundreds of millions of people and, together, are the most common cause of liver cirrhosis and cancer.

Hepatitis A virus

Hepatitis A virus (HAV), classified as hepatovirus, is a small, unenveloped symmetrical RNA virus.

Hepatitis B virus

Hepatitis B virus (HBV), double-stranded DNA viruses which replicate.

Hepatitis C virus

Hepatitis C virus (HCV), is an enveloped single-stranded RNA virus cancer in some countries.

Hepatitis D virus

Hepatitis D virus (HDV) is an unusual, single-stranded, circular RNA virus .

Hepatitis E virus

Hepatitis E virus (HEV), non-enveloped, single-stranded RNA virus.

Causes of hepatitis

Type of hepatitis	Common route of transmission
hepatitis A	exposure to HAV in food or water
hepatitis B	contact with HBV in body fluids, such as blood, vaginal secretions, or semen
hepatitis C	contact with HCV in body fluids, such as blood, vaginal secretions, or semen
hepatitis D	contact with blood containing HDV
hepatitis E	exposure to HEV in food or water

Common symptoms of hepatitis

1. fatigue
2. flu-like symptoms
3. dark urine
4. pale stool
5. abdominal pain
6. loss of appetite
7. unexplained weight loss
8. yellow skin and eyes, which may be signs of jaundice.

How hepatitis is diagnosed?

1. History and physical exam
2. Liver function tests
3. blood tests
4. Liver biopsy
5. Ultrasound