

The 'mystery' liver disease

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In news— The 'mystery' liver disease has been detected among children in some parts of the United States and Europe, mostly the United Kingdom recently.

About the mystery illness-

- The mysterious liver disease is an emerging cause of concern as the illness is not being explained by known causes.
- **Children between the age of 1 to 6 years old have been the target of this disease** especially in the US and the UK.
- **Symptoms of this illness are similar to general liver diseases like hepatitis or liver inflammation** but the cause remains unknown.
- **Jaundice, diarrhoea and abdominal pain have been reported** in patients infected with the mysterious liver disease.
- The liver processes nutrients, filters the blood and fights infections. Hepatitis disease can be life-threatening if left untreated.
- **According to the UK's Health Security Agency (UKHSA) one of a number of potential causes of the mysterious disease could be a group of viruses called adenoviruses**, which cause **common respiratory illnesses** such as the common cold.
- Most people infected with an adenovirus recover from the illness without any major complications. However, rarely, hepatitis can be a rare complication resulting from the virus.
- Human to human transmission of adenoviruses is possible by touching contaminated surfaces and through the respiratory route.
- As per US health department, the children presented

themselves with symptoms of gastrointestinal illness and varying degrees of liver injury including liver failure.

- **WHO said that while some cases tested positive for SARS-CoV-2 and/or adenovirus, genetic characterization of viruses should be undertaken to determine** any potential associations between cases.

Hepatitis-

- Hepatitis refers to a highly contagious liver infection that causes an inflammation of the liver in which tissues react to irritation or injury which generally results in swelling and pain.
- Hepatitis is a group of infectious diseases known by its various variants, like A, B, C, D, and E.
- Hepatitis is commonly caused by a viral infection, but there are several risk factors, such as excessive consumption of alcohol, toxins, some medications and certain medical conditions.
- Its symptoms include dark urine, pale and grey-coloured stool, itchy skin, yellowing of the eyes and skin, high temperature, muscle and joint pain and loss of appetite among others.

Types of Hepatitis

There are 5 viruses that can cause viral hepatitis. These include:

Hepatitis	A	B	C	D	E
Transmission	-Fecal-Oral -Contaminated Food/Water	-Blood to blood -Sex	-Blood to blood -Sex (less common)	-Blood to blood -Sex -Only occurs when HBV is present	-Fecal-Oral -Contaminated Food/Water
Chronic Infection	No	Yes	Yes	Yes	Genotype 3 only
Prevention	-Pre-exposure vaccine	-Pre-exposure vaccine	-Screening donor blood -Harm reduction	-Pre-exposure vaccine	-Ensure safe drinking water, -Avoid undercooked pork & shellfish
Treatment	-Management of symptoms	-Treatment for management of chronic infection	-Treatment/cure for chronic infection	-No approved treatments	-Management of symptoms

Adenoviruses-

- **Adenoviruses are common viruses** that cause a range of illnesses.
- They **can cause cold-like symptoms, fever, sore throat, bronchitis, pneumonia, diarrhoea, and pink eye (conjunctivitis).**
- One can get an adenovirus infection at any age.
- People with weakened immune systems or existing respiratory or cardiac disease are more likely than others to get very sick from an adenovirus infection.