

Hepatitis E Virus

Hep E or HEV

HEV is a risk group 2 virus. It is considered a **reproductive pathogen** as susceptibility to infections due to immunologic changes increases during pregnancy. Severe infections can lead to acute liver failure and maternal death. Vertical transmission to the fetus is linked to miscarriage, stillbirth, or neonatal death and very high risk of preterm delivery with poor neonatal survival rates.

How can I be exposed to HEV?

- Exposure is primarily via contact with infected feces.
- Human infection can occur via blood transfusion, although it is rare.
- Mother to child transmission can occur during pregnancy.
- Laboratory workers may be exposed primarily through ingestion, parenteral inoculation or exposure to infected animal materials. Exposure to aerosols is a significant laboratory risk.

How can I protect myself from exposure?

- Avoid direct skin contact by wearing protective clothing and gloves.
- Avoid mucous membrane exposure by using eye/face protection for procedures that may produce splashes.
- Avoid respiratory exposure by using a biosafety cabinet or other primary containment device and wearing a respirator for procedures that may produce aerosols, particularly centrifugation, resuspension of pellets, and washing.
- The use of needles, syringes, and other sharp objects should be strictly limited, and additional precautions should be taken when working with animals.

What should I do if I think I've been exposed?

Wash the affected area immediately for 15 minutes with soap and water and seek medical attention.

What symptoms should I look for after a potential exposure?

Typical symptoms include fever, loss of appetite, stomach cramps, jaundice, dark urine, & tiredness.

How long does it take for symptoms to develop?

Symptoms usually develop within 2-10 weeks after exposure.

Is there a treatment or vaccine?

There is currently no FDA-approved vaccine available in the US. There is one vaccine approved for use in China in individuals aged 16 and older. Treatment is supporting and dependent on symptoms.

Can I transmit it to other people?

While direct person-to-person spread is uncommon, it can occur through fecal contamination, blood transfusions, organ transplants, and from mother to fetus.

Can I transmit it to my pets?

HEV can transmit from infected humans to animals, primarily pigs, via fecal contaminated water or environment.

Can it survive on surfaces?

HEV is highly stable on surfaces, surviving for weeks to months at room temperature. This allows for potential transmission through contaminated objects. It is resistant to drying and common alcohol-based disinfectants.

See Pathogen Safety Data Sheet for More Information

