

Communicable Diseases Factsheet

Hepatitis E

Hepatitis E is a viral infection that affects the liver. Infection can occur after drinking faecally-contaminated water in developing countries or consuming undercooked pork products in Australia. Infection can be prevented by avoiding drinking untreated water and thoroughly cooking meat.

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What is Hepatitis E?

'Hepatitis' means inflammation or swelling of the liver. It can be caused by chemicals or drugs, or by infection with different kinds of pathogens, including viruses. Hepatitis E is caused by the hepatitis E virus and most people recover within four to six weeks. It can be serious in pregnant women, especially during the third trimester, and in people who have pre-existing chronic liver disease.

What are the symptoms?

The symptoms of hepatitis E include:

- loss of appetite
- nausea
- vomiting
- tiredness
- abdominal/gut pain
- fever
- dark urine
- pale stools
- joint pain
- yellowing of skin and eyeballs (jaundice).

Symptoms develop on average 3 to 6 weeks after the infection, though this differs between people and can be anywhere from 15 to 64 days after infection.

Some people, especially children, have no symptoms but can still spread the virus to others. Hepatitis E can worsen chronic liver disease. Occasionally, hepatitis E can cause acute liver failure, which can lead to death.

How is it spread?

Hepatitis E can be spread through:

- eating food or drinking water in countries with poor sanitation
- eating insufficiently cooked meat, especially pork liver, venison (deer) and wild boar
- eating raw shellfish that has been contaminated by sewerage
- eating food prepared by an infectious person
- direct contact with infectious animals
- vertical transmission from a pregnant woman to her baby
- direct contact with an infected person such as a household member or sexual partner, or in child care or health care settings (although direct person-to-person transmission of hepatitis E is uncommon).

Hepatitis E has been found in pig herds in Australia. In 2014, a number of people were infected with hepatitis E after eating Australian produced pork livers or products made from pork livers such as pork liver sausages or pork pâté.

People with hepatitis E are thought to be infectious for around 2 weeks after the onset of symptoms, but the virus has been detected in stools of an infected individual up to 6 weeks after the onset of symptoms.

Who is at risk?

People who live in or travel to countries with poor sanitation are at most risk. The virus is common in many parts of central and south-east Asia, the Middle East and North Africa, the Mediterranean region, Mexico and South America. Over 60% of all hepatitis E infections occur in East and South Asia.

In Australia, those who eat undercooked pork products, particularly pork livers, are at risk of becoming infected.

How is it prevented?

In countries with poor sanitation:

- use bottled or boiled water (for drinking and for brushing your teeth)
- do NOT consume untreated water or ice
- only eat fruit or vegetables that you peel yourself and food that is freshly cooked and piping hot.

Wash your hands thoroughly using soap for at least 10 seconds and dry them with a clean towel after using the toilet, after caring for someone with diarrhoea and/or vomiting, and before preparing or eating food.

It is important that pork products including pork liver are cooked to 75°C at the centre of the thickest part for at least two minutes as measured using a digital probe meat thermometer before removing meat from the heat source. Allow livers to rest for at least three minutes before consuming.

There is no commercially available vaccine in Australia for hepatitis E.

What can be done to avoid infecting others?

If you have hepatitis E, as well as washing your hands thoroughly, you should avoid the following activities while infectious (for at least 2 weeks after onset of symptoms):

- preparing food or drink for other people
- providing health care for others
- sharing eating or drinking utensils with others
- sharing linen and towels with others
- swimming or using hot tubs
- having sex
- donating blood

People who have hepatitis E should check with their doctor before returning to:

- work involving handling food or drink
- work involving close personal contact, such as child care and health work
- child care or school.

As there is a small risk that some individuals may remain infectious for up to 6 weeks after the onset of symptoms, careful hand washing should continue to be performed during this period.

How is it treated?

There is no specific treatment for hepatitis E. Prevention is the most effective approach against the disease.

How is it diagnosed?

Diagnosis is based on the patient's symptoms and confirmed by a blood test showing antibodies to hepatitis E.

What is the public health response?

- Doctors, hospitals and laboratories must notify cases of hepatitis E infection to the local Public Health Unit.
- Public Health Unit staff will work with the doctor, the patient or the patient's family to identify close contacts at risk of infection and arrange for those at risk to receive information about the disease. Public Health Unit staff have guidelines for managing cases of hepatitis E in people who attend or work at a child care centre, and in people who handle food for sale.
- In the event of an outbreak of hepatitis E, Public Health Unit staff will investigate to identify the cause and prevent further infections.

For further information phone your local Public Health Unit on 1300 066 055