

Hepatitis A and Hepatitis E

Food Act 2006

Hepatitis may be due to a viral infection that causes inflammation of the liver. There are several strains virus that can cause hepatitis, with hepatitis A (HAV) and hepatitis E (HEV) strains able to be transmitted to humans through food. The incubation period for HAV averages 14-28 days and for HEV, two to nine weeks. During this time, the virus multiplies in the cells of the intestinal epithelium (layers of cells that line the gut) before it is carried by blood to the liver. The virus is then shed in the faeces (poo).

How do Hepatitis A and Hepatitis E cause foodborne illness?

Primarily both viruses are spread via the faecal-oral route; when a person ingests food or water that is contaminated with the faeces of an infected person. The disease is generally associated with countries that have poor sanitation. However, hepatitis may still occur in developed countries, with outbreaks tending to be linked to a point source. These viruses survive well in the environment, are difficult to eliminate, survive in adverse conditions such as heating to 50°C, and pH 2 – 9.6, and have a low infectious dose.

Infection rates for HAV in Australia remain low, and exposure to the virus is generally due to travellers returning from affected countries, or through imported contaminated food. Outbreaks have been traced back to consumption of imported contaminated vegetables, berries and shellfish. HAV outbreaks have also been associated with child-care centres, nursing homes and prisons, through contact with dirty nappies, linen or towels of an infected person.

In developed countries, HEV has been known to spread through eating undercooked meat, especially pork liver, wild boar, venison (deer) and shellfish that have been grown in water contaminated by sewerage. In Australia, sources of HEV infection have been linked to undercooked pork products made with liver such as pork liver sausage or pork liver pâté.

Who is at risk?

Anyone can be infected by HAV or HEV, but people who live or travel to countries with poor sanitation are at most risk. For most people, HAV and HEV cause a mild, self-limiting disease.

Those who have not had HAV or who have not been vaccinated for HAV are at risk of being infected with the disease. Almost all people who acquire HAV recover completely and may acquire lifelong immunity.

Currently, there is no vaccine for HEV. HEV can cause severe illness in pregnant women including death. HEV may also cause foetal complications, including preterm babies and low birth weights.

HAV and HEV can worsen chronic liver disease and occasionally cause acute liver failure and death. People with compromised immune systems are at risk for more severe disease outcomes.

What are the symptoms of Hepatitis A and E foodborne illness?

Common symptoms include:

- abdominal (belly) pain
- loss of appetite
- nausea
- vomiting
- fever and chills
- mild headaches
- tiredness
- jaundice (yellowing of skin and eyes)
- pale coloured stools (poo)
- joint pain
- dark urine

Most people infected with HAV or HEV will experience symptoms within two to six weeks after exposure. Symptoms associated with HAV typically last one to three weeks. HEV symptoms generally resolve within two to six weeks. Severe cases of hepatitis may last up to several months. Some people, especially children, may have no symptoms but can still spread the virus to others.

Prevention

The most effective way of preventing HAV and HEV foodborne illness can be achieved by:

- washing your hands with soap, and drying them with disposable paper towels, before preparing or eating food especially after going to the toilet or handling objects that may have been contaminated such as nappies
- if you have had symptoms, do not return to work (or school) or prepare food for other people without clearance from a medical practitioner
- avoid direct contact (including sexual) with any person who has hepatitis
- keeping your kitchen clean and ensuring all food contact surfaces are cleaned and sanitised before preparing food
- cooking products linked to sources of hepatitis A (imported frozen berries) prior to consuming eliminates the risk
- cooking products linked to sources of hepatitis E (pork products, including pork liver) to 75°C at the centre of the thickest part for at least two minutes.

What to do if you suspect a case of foodborne illness

If you suspect you have foodborne illness, seek medical advice.

A faeces (poo) sample may be required to confirm the presence of HAV or HEV.

If you suspect you have hepatitis, do not prepare food or drinks for others and ensure good personal hygiene including washing hands thoroughly with soap.

If you have a concern about a food product or a food business, Queensland Health provides an online form to make a food complaint. This is available at <https://phconnect-foodcomplaints.health.qld.gov.au>.

Further information

For health advice, please contact your doctor or nearest health facility, or call 13 HEALTH ([13 43 25 84](tel:13432584)).

For food safety advice and further information relating to *hepatitis A or E*, contact your local Public Health Unit at www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units.

The Food Pantry has advice related to food safety for food businesses and consumers at www.qld.gov.au/foodpantry.