



## Hepatitis E—Update

Reports of hepatitis E (HEV) infection have increased in Scotland over recent years, as elsewhere in the UK. Laboratory reports (Scotland) have increased from 13 in 2011, to 161 in 2014. Although some of this increase may be due to increased testing, it is also believed to reflect a real increase in incidence.

In developing countries it's a leading cause of acute viral hepatitis, globally accounting for 70,000 deaths and 3000 stillbirths.

### What is hepatitis E?

HEV is an RNA virus, and there are four known genotypes that infect mammalian hosts. G1 and G2 primarily infect humans and account for most disease in developing countries where the disease affects mainly young adults (15 to 39 years) with a preponderance in males. In pregnant women genotype 1 has a high mortality rate.

In industrialised countries G3 is the main cause of hepatitis E and the disease is more common in older adults, with about two-thirds being males. In Scotland in 2014 98 (61%) of reports were from males and of these, 35 (37.5%) were from males aged 65 years or older.

Transmission: G1 and G2—faecal oral route; G3 & G4—zoonotic. G3 has been identified in pigs, deer, boar and shellfish. One UK study of HEV in pigs entering the food chain showed that nearly 95% of animals were seropositive at slaughter. In Europe and North America most cases are thought to have been acquired through the dietary route, though cases can also be imported from travel to developing countries. It can also be transmitted parenterally via blood and blood components. There is no evidence within the UK of person to person transmission. It's uncertain whether infection confers life-long immunity.

### Clinical presentation

The incubation period ranges from 15 to 60 days (average 40). The clinical spectrum ranges from asymptomatic infection (in the majority) through to fulminant hepatitis. Symptoms may include fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, jaundice, dark urine and joint pain. Pregnant women, individuals with pre-existing liver disease and immunosuppressed individuals are at greater risk for severe disease. Chronic infections can progress to liver fibrosis and cirrhosis.

### Treatment

Most cases will clear without treatment. A few chronic cases may require antiviral treatment. There is one vaccine, but licensed only in China.

### Testing

HEV testing is recommended in any individual displaying signs and symptoms of acute hepatitis (including jaundice and raised LFTs). Information regarding travel and relevant food should be included with clinical details.

Testing should also be undertaken in immunocompromised individuals who have persistently deranged liver transaminases.

### Public health action

The Health Protection team will contact the treating clinician and the patient. They will write to the patient providing an information leaflet, and also ask them to complete a surveillance form which will help us understand more about possible sources of infection.

## Food education resources pack for primary schools

Food Standards Scotland (FSS) have re-launched its Education Resource pack for schools, the contents of which are available for download for the first time.

FSS works with the education sector in Scotland to provide support and resources that encourage healthy eating, good food hygiene practice and food safety knowledge. Its education pack (available at: <http://www.foodstandards.gov.scot/education-pack> ) is intended to help teachers deliver the Health and Wellbeing areas of the Curriculum for Excellence.

The pack includes:

- ◆ Food cards (252—with information about nutrition and storage etc)
- ◆ 2 food safety scene posters and accompanying stickers
- ◆ Teachers' Guides—suggested classroom activities using the cards and scenes

## Increase in reports of *Campylobacter*

Health Protection Scotland has reported that in the first 19 weeks of 2015, 2115 of laboratory confirmed cases of *Campylobacter* have been reported. This is an increase of 278 (15%) compared to the same period in 2014. This upward trend was also noted in 2014 when there was a 7.7% increase in the number reported over the whole year compared with 2013.

*Campylobacter* is the most common cause of food poisoning in Scotland, and it can be severe, lasting for up to 10 days and may lead to long-term complications.

Food Standards Scotland research has shown that 64% of cases are linked to chicken, and 29% of cases to cattle and sheep. This highlights the need for good hygiene practice when preparing and cooking chicken, and also to be aware of the risks of the environment.

Food Standards Scotland have published advice on their website at:

<http://www.foodstandards.gov.scot/news/eat-safe-summer>

It includes tips for barbeques and picnics, and of course reiterates the advice **not** to wash raw chicken.

### The Health Protection Team are:

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Comments, feedback and suggestions all welcome.