

# Shiga toxin-producing Escherichia coli

## An information leaflet for cases

The Public Health Agency (PHA) local Health Protection Team is contacting you because the result of the stool (faeces or poo) sample submitted by you or your child is positive for a bacterium called Shiga toxin-producing Escherichia coli (STEC). There are different strains of STEC that can cause illness. Several of the important strains of STEC are O157, O26 and O145.

The local laboratory has sent your sample to a Reference Laboratory for further investigations and the final results will be available within the coming weeks.

In the meantime, because STEC can cause serious illness and can be passed from person to person, we are contacting you to:

- identify potential sources of the infection;
- provide some information on the infection;
- prevent the spread of infection to others.

### Next steps

Along with our colleagues in Environmental Health, we will complete a questionnaire with you to help identify the potential source(s) of your infection and any risks to people you may be in contact with. This will include:

- activities you have done, places you have been, and food you have eaten in the seven days before your symptoms started;

- information on you and your household and any other close contacts;
- providing information on the infection and how you can prevent the spread of infection to others.

**Your personal identifiable information will be held confidentially and only shared with stakeholders or those directly involved in managing this infection in accordance with General Data Protection Regulations (GDPR) (EU) 2016/679.**

### STEC infection

Most people get better within five to seven days. Treatment involves drinking plenty of fluids as vomiting and diarrhoea can lead to dehydration. Antibiotics should not be used as there is no evidence that they are helpful to treat STEC infections and they may increase the risk of complications.

Rarely, symptoms may be severe or even life-threatening, causing Haemolytic Uraemic Syndrome (HUS), which may occur up to two weeks after the start of the diarrhoea. If your symptoms do not go away, or you start to feel more unwell, have increasing tiredness, poor appetite, you develop easy bruising, feel you are passing less urine than usual, or your urine is pink/brown in colour, please seek urgent medical advice as these symptoms could indicate the start of HUS and you may need further tests.

## Staying away from work or school/ childcare

You should stay away from work or school/ childcare until you have stopped having symptoms for at least 48 hours to avoid passing it on to others. For some people, this time may be longer and further samples may be needed because of the higher chance of spreading the infection to others or of spreading it to people who may be more likely to develop severe illness.

This includes:

- children aged five years and under, particularly those attending childcare, pre-school or school;
- those that need help with their own personal hygiene at home, work or school;
- those that prepare or serve unwrapped food that is not heated further;
- healthcare workers with direct contact with highly susceptible patients for whom an infection like STEC could have serious consequences.

## Children aged five years and under (up to sixth birthday)

Although rare, the risk of HUS is highest in children aged five years and under. Some children aged five years and under also continue to pass STEC in their poo for longer than adults, sometimes for many weeks or even months.

For these reasons, children aged five years and under may need to stay away (be excluded) from childcare settings until their poo samples are clear of the infection. If there are other

children aged five years and under in the household, they may also need to be excluded, whether they have symptoms or not, until poo samples show that they have not picked up the infection. The Public Health Agency (PHA) Health Protection team or Environmental Health Officers will be in contact to advise you if exclusion is needed for you and/or your contacts. They will provide you with information on the clearance process and aim to support you to get you or your child back to normal activities as quickly as possible.

Please read the rest of this leaflet and in particular follow the advice on **Preventing others from becoming ill** to minimise the risk of passing the infection on to others.

## General information on STEC

### What is STEC (Shiga toxin-producing Escherichia coli)?

Shiga toxin-producing Escherichia coli (STEC), are a group of bacteria that cause infectious gastrointestinal inflammation. A small number of people can go on to develop a potentially life-threatening illness called Haemolytic Uraemic Syndrome (HUS). There are different strains of STEC. Some of the important strains are O157, O26 and O145. The risk of HUS is highest in children aged five years and under.

We know that STEC is very infectious and can be easily passed to others. It has also been the cause of several outbreaks following eating infected food, contact with infected people, and being in contact with certain animals or their environment. In some European

countries, other types of STEC are the cause of serious illness and outbreaks.

## Becoming infected

You may become infected with STEC in a variety of ways:

- eating infected/contaminated food that has not been cooked all the way through, particularly minced meat products such as burgers and sausages, or salad items that have not been washed properly;
- handling/preparation of food contaminated with soil for example, potatoes and leeks where the soil has not been properly washed away;
- drinking infected/contaminated water such as from streams, rivers and lakes etc. which may contain animal poo;
- close contact with animals, particularly cattle, sheep and goats - animal saliva may be contaminated because of the way animals clean themselves;
- direct contact with animal poo on the animal itself, in their pen, or on the floor (which can then get transferred into homes on soles of shoes, for example);
- contact with an infected person, particularly if you don't wash your hands thoroughly after using the toilet or before handling food.

## Symptoms

It usually takes between two and four days from being infected with STEC to develop symptoms, which may include:

- no symptoms;
- very mild diarrhoea;

- stomach pain;
- vomiting;
- fever;
- severe diarrhoea with blood;
- passing less urine than normal;
- haemolytic uraemic syndrome (HUS).

## Preventing others from becoming ill

Normal cooking temperatures kill STEC and it can be easily washed off your hands with warm water and soap. For extra reassurance, you can use antibacterial gels/wipes AFTER washing your hands with soap and water.

Key steps you can take include:

- **Wash hands thoroughly** with liquid soap and warm running water after using the toilet (or helping others including changing nappies), before and after handling raw meat, before meals and after contact with animals. If you have false nails, pay particular attention to cleaning these thoroughly;
- **Clean hard surfaces** including toilet bowls, flush handles, taps and hand basins regularly with hot soapy water followed by a disinfectant/sanitiser;
- **Wash dirty clothes, bedding and towels** on the hottest wash cycle possible and do not share towels or face flannels with someone who is infected;
- **Clean animal faeces from footwear and buggy wheels** after visits to farms and animal attractions, and wash your hands after doing so;

- **Stay away from work/school/childcare** until 48 hours after you've stopped vomiting or having diarrhoea, and comply with any additional exclusions recommended by the Environmental Health and/or Health Protection Teams.

## Treatment and care at home

There is no specific treatment for STEC infection. People who are infected can usually be cared for at home and most will get better without medical treatment.

It's important to drink plenty of fluids, as diarrhoea can lead to dehydration.

Antibiotics are not recommended, and may increase the risk of complications, including HUS.

Anti-diarrhoea drugs such as loperamide (Imodium) are also not recommended as they may prolong your exposure to the toxin.

## Further information about STEC

Further information relating to STEC can be found on the following websites:

### Public Health Agency

[www.publichealth.hscni.net/directorate-public-health/health-protection/e-coli-o157](http://www.publichealth.hscni.net/directorate-public-health/health-protection/e-coli-o157)

### UK Health Security Agency

[www.gov.uk/government/publications/vero-cytotoxin-producing-escherichia-coli-symptoms-how-to-avoid-how-to-treat/vero-cytotoxin-producing-escherichia-coli-symptoms-how-to-avoid-how-to-treat](http://www.gov.uk/government/publications/vero-cytotoxin-producing-escherichia-coli-symptoms-how-to-avoid-how-to-treat/vero-cytotoxin-producing-escherichia-coli-symptoms-how-to-avoid-how-to-treat)

### The UK E.coli Support Group called H.U.S.H (Haemolytic Uraemic Syndrome Help)

[www.ecoli-uk.com](http://www.ecoli-uk.com)



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[www.publichealth.hscni.net](http://www.publichealth.hscni.net)