

Shedding light on *E. coli* O157

What you
need to
know



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SCOTTISH EXECUTIVE

Why do we need to know about *E. coli* O157?

Introduction

We are lucky enough to have some of the most beautiful countryside in the world on our doorstep and many of us and our families enjoy outdoor activities like days out in the country, visits to petting zoos and even weekend camping expeditions.

It is important that we enjoy our countryside safely, so we all need to be aware of the potential risks of *E. coli* O157 when we're around grazing animals or land where these animals have been kept.

This risk is small, but by taking a few small steps we can easily reduce our risk and enjoy the great outdoors.

The risk is low for adults, but it's greater for children and, in some cases, it can have very serious implications. However, with a few simple precautions these risks can be reduced.

Background

The first cases of *E. coli* O157 infection didn't appear until 1982 in America. So it's a relatively new germ and wasn't seen as a risk when many of the people who are now parents and teachers were growing up. But, following high-profile food outbreaks in recent years many of us are now aware of the serious implications, although many are unaware that the infection can be contracted via direct contact with animals/animal pasture.

E. coli O157 presents a risk to the more vulnerable, such as children and older people, with around 250 cases being diagnosed every year in Scotland. Symptoms can vary from stomach-ache to kidney damage and in some extreme cases, even death.

Recent research shows that almost a quarter of cattle herds in Scotland and many sheep and goats carry this germ. It doesn't affect the animals in any way and they show no signs of infection or illness, which means that care must be taken around all animals and the land they've been kept on.

How is it transmitted?

Animal Contact

Most of us associate *E. coli* O157 with “food poisoning”, but it can be spread simply by touching animals like cattle and sheep. All of these animals naturally carry a range of micro organisms which, while not being harmful to them, can be a danger to us. When we touch an animal we can pick up the germs instantly, so even stroking infected animals can be potentially dangerous.

Environmental Contact

E. coli O157 is also spread through animal droppings. This means that special care needs to be taken around any land where animals might have been. You must be especially careful in wet weather because rain draining from fields can lead to contamination of paths and streams. In wet conditions *E. coli* O157 can easily pass from shoes, hands and clothes to fences, gates and stiles.

So how is it transmitted to us?

As you’ve just read, we can pick up *E. coli* O157 by coming into direct contact with animals or from touching something which has been infected by their droppings.

However, for it to be a danger to us the germ must be swallowed.

Unfortunately it only has to be ingested in relatively small quantities for it to be dangerous. So hand hygiene is extremely important.

How is it prevented?

General Advice

Hands should always be thoroughly cleaned before eating or touching food.

This is something that's really important, but many people (adults too!) forget to clean their hands – or “just can't be bothered”. Hands that are covered in germs can look clean, so it's important that children learn to wash hands before eating as a routine part of daily life. We can get all sorts of food-poisoning germs from unwashed hands – not just *E. coli*. Simple hot water and soap is enough to do the job, but wet wipes are probably the best alternative when there's not a sink available.

Make sure children wear appropriate clothing including sturdy outdoor shoes.

Always check that cuts and grazes on children's hands are covered with a waterproof dressing.



During a farm visit

Older children must understand that they have to behave sensibly around animals and follow all the rules of the farm, country code or petting zoo. Younger children must be carefully supervised at all times.

Children must never kiss the animals, however cute and cuddly they look.

Make sure children wear appropriate clothing including sturdy outdoor shoes – it's very important they don't wear sandals – and ideally they should wear wellington boots wherever possible.

They should always wash their hands thoroughly before eating and after any contact with animals whatsoever. Ideally, hands should be washed using hot running water and soap, although we know that this often isn't possible. Antibacterial wipes/rubs can also be used. Younger children should be supervised to ensure hands are washed thoroughly.

They must only eat food that they've brought with them, or that has been bought for human consumption in a farm shop.

Make sure that children in your care – especially the younger ones – do not suck their fingers or put their hands, pens and pencils into their mouths.

Always check that the children do not touch or pick up any tools which are lying around and they mustn't climb on walls and animal pens.

After the visit

Ensure children thoroughly clean or change their footwear before leaving. And they must always wash their hands one final time before heading back for home or school.

Further Information

Food Standards Agency

General Website:

www.food.gov.uk

Advice on *E. coli* O157:

www.eatwell.gov.uk/healthissues/foodpoisoning/abugslife/#elem219000

Health Protection Scotland (formerly Scottish Centre for Infection and Environmental Health)

General Background Information:

www.show.scot.nhs.uk/scieh/environmental/enviropdf/E.coli.pdf

Specific Advice to Farmers and others responsible for farms open to the public:

www.show.scot.nhs.uk/scieh/environmental/enviropdf/E-coliFarmers.pdf

Haemolytic Uraemic Syndrome Help (HUSH)

A charitable organisation which aims to increase public awareness of *E. coli* O157 and to create a means of communication between families affected by *E. coli* O157:

www.ecoli-uk.com

Scottish Executive

E. coli O157 Schools Information Pack:

www.scotland.gov.uk/library5/health/ecsip-00.asp

Royal Highland Education Trust

www.rhet.org.uk



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