

# E. coli

How E. coli spreads and what you can do to prevent it contaminating your food.

Escherichia Coli (known as E. coli) is a type of bacteria that can be found in the intestines of animals and humans. Many strains of E. coli are harmless to humans, but some can cause serious illness. Most cases of foodborne illness are caused by a strain known as E. coli O157.

## Stopping the spread of E. coli

E. coli O157 is often passed on through raw and undercooked meats. It can also be spread through other contaminated foods, such as vegetables and salads, water or unpasteurised milk. You can also catch it from person-to-person contact.

## Avoiding E. coli O157 at home

Like many types of bacteria, E. coli can grow on food when it is in the 'danger zone' between 8°C and 60°C. You can help keep your food safe by:

- [chilling your food](#) below 8°C - this will stop or significantly slow the growth of bacteria including E. coli
- [cooking food correctly](#) by following the guidance on time and temperature – this will kill E. coli
- [avoiding cross-contamination](#) which might lead to bacteria passing from raw foods to ready-to-eat foods via things like reusable shopping bags, knives and chopping boards
- use food and drink by the '[use by](#)' date on the label, even if it looks and smells fine – eating food after this date could put your health at risk
- [good personal hygiene](#) is also essential when you're preparing food. This will help ensure that any bacteria you may have come into contact with isn't passed to your friends and family in their food.

### FSA EXPLAINS

## How E. coli O157 makes people ill

Although many forms of E. coli are harmless and can help the breakdown of food, some can cause serious food poisoning such as E. coli O157.

Vero cytotoxin E. coli (VTEC) O157 produces a toxin which is able to rupture and

destroy red blood cells. The destruction of the cells can lead to a serious condition called hemolytic-uremic syndrome (HUS) and kidney failure.

## **Avoiding E. coli O157 when eating out**

We work with food businesses to help them keep foodborne bacteria out of their products and keep their customers safe. As part of this, we have developed guidance on the steps food businesses should take to prevent cross-contamination between raw foods and ready-to-eat foods.

When you're choosing where to eat out, remember that the [Food Hygiene Rating Scheme](#) is a good guide to a food business's hygiene standards.

## **Our research**

Our research into E. coli has covered a wide range of issues including risks associated with the consumption of meat, dairy products and vegetables.

Outbreaks have been linked to contaminated soils on the surface of vegetables. We have commissioned research to determine the risk soil contamination has on human health.

Research has also investigated the risks associated with less than thoroughly cooked burgers and their safe production in relation to VTEC O157. The results of this work has led to comprehensive guidance for food businesses on the safe production of burgers.

We have also funded research to better understand of E. coli O157 in cattle and develop potential on-farm intervention strategies for its reduction.

In the UK, [Food Standards Scotland leads on much of the current E. coli work relating to cattle](#) which we support.