

# Escherichia coli (E.coli)

Single  
Point  
Lesson

There are many different types of E.coli, most of which are carried harmlessly in the gut. However when strains of E.coli are outside their normal habitat of the gut they can cause serious infections, several of which can be fatal.

## Bacteraemia (blood stream infection)

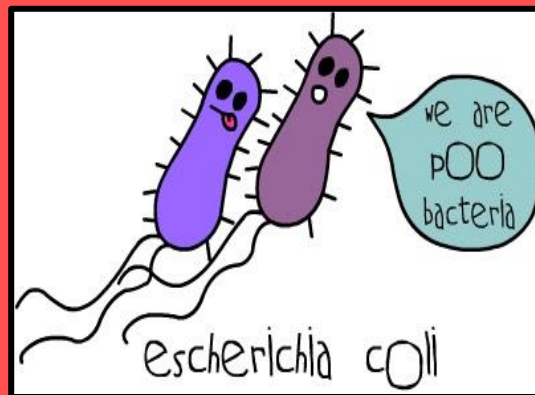
E-coli in the blood stream is usually a result of acute infection of the kidney, urine or other organs in the abdomen. It is now one of the most commonest cause of bacteraemia reported.

DOH say: we have had **38,000 E.coli bacteraemia cases reported by NHS Trusts in 2015/16 – that's an 18% increase from 2012/13**

**Targets are set by DOH this year to reduce E-coli bacteraemia by 10%.**

## Gastrointestinal (diarrhoeal infections)

Although the gut is the main natural habitat of E-coli, some strains are capable of causing diarrhoeal disease that can be severe and life threatening. The best known of these is *E-coli 0157*. This and other similar strains produce toxins that cause bloody diarrhoea



*E. coli* bacteraemia incidence rates increase with age, across both sexes, with a high proportion of *E. coli* bacteraemia occurring in patients aged  $\geq 65$  years (85.5%).

## Urinary tract infection

E-coli is the commonest cause of urinary tract infections. Signs of infection include fever, urgency, frequency, difficulty passing urine or new incontinence in care home residents. Follow PHE guidance for treatment:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/345784/UTI\\_quick\\_ref\\_guidelines.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/345784/UTI_quick_ref_guidelines.pdf)

## Infection control precautions

- Hand washing
- Gloves and aprons.
- Environmental cleaning
- Infection control training
- Aseptic technique
- Antimicrobial use.
- Follow procedures

## Wound infections and abscesses.

E-coli is a common cause of infections in wounds especially those following operations on the abdomen.