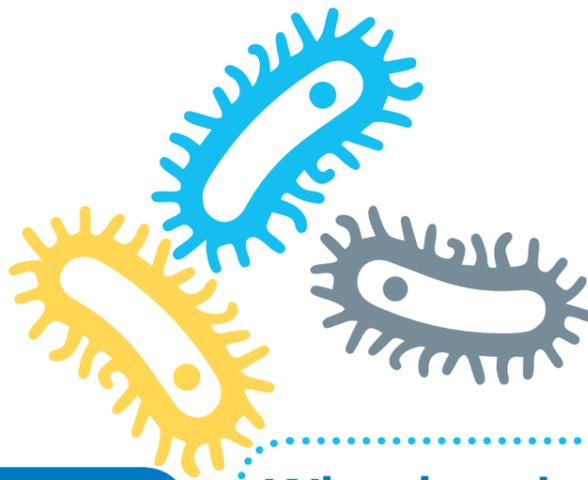


E.coli



What is E.coli?

Escherichia Coli (E. coli) is a gram negative rod shaped bacteria found in the gut of most people and animals. E.coli does not usually cause any problems whilst it is living in the gut, but if the bacteria contaminates areas of vulnerability (wounds, catheter sites etc.), infection can occur.

What is the goal?

Goals for this quality premium are set by the health secretary:

To reduce E. coli bacteraemia rates by 10% each financial year – leading up to a 50% reduction by 2020. This equates to a reduction of 61 cases in Leeds for 2018/19.

How can E.coli bacteraemia be prevented?

As a healthcare professional, breaking the chain of infection is one of the most effective ways of preventing any bacteraemia. This includes:

- Good hand hygiene technique
- Complying with the 5 moments of hand hygiene
- Appropriate PPE usage
- Reviewing the need for invasive devices such as urinary catheters
- Timely diagnosis of infections and appropriate prescribing
- Prescribing based on sensitivities

Patients should also be encouraged to conduct effective hand hygiene:

- After toileting
- Before preparing and eating food
- Before handling invasive devices such as IV lines and urinary catheters

Further information can be found at:

www.improvement.nhs.uk/resources/preventing-gram-negative-bloodstream-infections/
www.phe.gov.uk

Why does it matter?

Gram negative bacteria account for one third of all blood stream infections (BSIs) and of this third, 65% are E. coli. In the 2015/16 financial year E. coli was responsible for 5,500 NHS patient deaths and by 2018, E. coli BSI will cost the NHS around £2.3 billion.

668 cases of E.coli bacteraemia were identified in Leeds (2016/17). 68% were community onset.

How do your patients get E.coli infections?

Because E. coli colonises the gut as part of the natural flora, it is easy for patients to infect themselves with E. coli, especially if they have open channels such as urinary and peripheral catheters, wounds, are immunosuppressed etc. and their hand hygiene is not adequate.

UTIs are the most common method of acquiring an E. coli bacteraemia, therefore, good hydration, catheter management (for those with catheters) and appropriate antibiotic therapy is paramount.

What are the risk factors?

- Urinary catheterisation
- Dehydration
- Older age
- Prostate problems (enlargement, TURP etc.)
- Gall bladder or kidney stones
- Long term conditions (COPD, bronchitis, diabetes)
- Open wounds or ulcers
- Recent hospital admission or surgical procedures
- IV lines

