

# Extended Spectrum **Beta-Lactamase** (ESBL)

**This leaflet has been produced to help you understand what an ESBL infection is and to answer some of your questions.**

## What are Extended-Spectrum Beta-Lactamases (ESBL)?

ESBL are enzymes that can be produced by bacteria (germs) making them resistant to some antibiotic drugs such as penicillin's and cephalosporins. Infection caused by an ESBL producing bacteria is usually referred to as an ESBL infection.

ESBLs have been widely detected among *Escherichia coli* (*E. coli*) bacteria (germs). *E. coli* normally live harmlessly in the gut. However, if ESBL producing germs get the opportunity to enter elsewhere in your body, they can cause an infection.

## Is this the type of *E. coli* that causes food poisoning?

No. The ESBL-producing *E. coli* are associated with urinary infections rather than food poisoning.

## What illnesses do ESBL producing *E. coli* cause?

*E. coli* are one of the most common bacteria causing infection in humans particularly urinary tract infections. These infections can sometimes progress to cause more serious infections such as blood poisoning which can be life threatening. ESBLproducing strains are ones more difficult to treat because of their antibiotic resistance.

## Is it treatable?

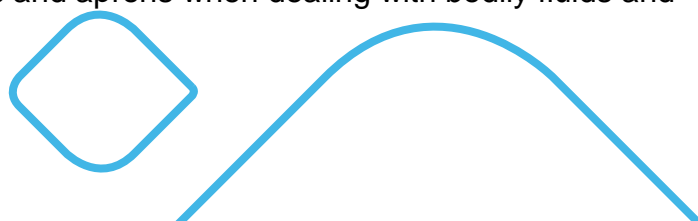
Yes, although there is a reduced choice of antibiotics to treat an ESBL infection there are other antibiotics that your doctor can prescribe to treat the infection. Some people who are found to have an ESBL, but do not have any signs of infection, are described as being colonised with an ESBL and will not require treatment.

## How does the germ spread?

Like most germs ESBL spreads on unwashed hands or on equipment that has not been cleaned correctly.

## How can the spread be controlled?

Infection control measures are always important to prevent the spread of infection. These include interventions such as hand washing, wearing gloves and aprons when dealing with bodily fluids and patient isolation.



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It is also important to ensure that antibiotics are prescribed only when needed, in the right dose, for the right duration, so as to reduce resistance developing in bacteria.

If you are a patient, please wash your hands after using the toilet, coughing, sneezing or handling tissues. Always wash hands before preparing or eating food. Always remind staff to gel hands prior to touching you.

If you are a visitor, please gel your hands on entering and leaving the ward with alcohol gel. Wash your hands with soap and water after leaving the person you are visiting.

If your hands are visibly dirty, wash them with soap and water.

## **Are some people at more risk than others?**

Most ESBL infections have occurred in people with underlying medical conditions who are already very sick, the elderly, patients who have been taking antibiotics or who have been previously hospitalised or have invasive medical devices such as urinary catheters.

## **How did I get ESBL?**

It is difficult to say exactly where you may have acquired an ESBL producing bacteria as ESBLs are found in both the community and in hospital environments.

## **Will this ESBL prevent me from going home?**

No, you will be able to go home as soon as your general condition allows.

## **Can I have visitors?**

Healthy people should not be at risk from antibiotic resistant germs such as ESBL. However, it is good practice for them to wash their hands with soap and water when entering and leaving your room.

Pregnant women and children are at no additional risk. Children may visit but very young babies should only do so in exceptional circumstances. Please ask nursing staff for more information if you are concerned.

## **For further information, please contact:**

Infection Prevention and Control 01225 825450

Royal United Hospitals Bath NHS Foundation Trust  
Combe Park, Bath, BA1 3NG

01225 428331 | [www.ruh.nhs.uk](http://www.ruh.nhs.uk)

If you would like this leaflet in email form, large print, braille or another language, please contact the Patient Support and Complaints team on 01225 825656.