

**Contact times:**

Office hours 08.00 to 1700  
Monday to Friday

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We use Next Generation Text for people with hearing difficulties. This used to be called BT Text Relay'. To contact us ring **18001 01274 36 4049**.

If you need this information in another format or language, please ask a member of staff.

**Office administrator email address:**

[Infection.control@bthft.nhs.uk](mailto:Infection.control@bthft.nhs.uk)

**Smoking**

Bradford Teaching Hospitals NHS Foundation Trust is a smoke-free organisation. You are not permitted to smoke in any of the hospital buildings or grounds, with the exception of the smoking shelters which are provided for visitors and patients only.

If you need this information in another format or language, please ask a member of staff to arrange this for you.

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**Bradford Teaching Hospitals**  
NHS Foundation Trust

# Extended Spectrum Beta-Lactamases (ESBL)

Information for Patients, Relatives,  
Carers and Visitors

**This leaflet will help you understand the causes, symptoms and treatments for infections due to ESBL bacteria.**

ESBL stands for Extended Spectrum Beta-Lactamases which are enzymes produced by bacteria that usually live in the gut, such as E coli and Klebsiella. The enzymes can destroy beta-lactam (penicillin-related) antibiotics and this makes the bacteria resistant to the antibiotics and makes infections more difficult to treat.

These bacteria can be spread from person-to-person both directly by not washing hands properly after using the toilet and indirectly by hands touching the contaminated environment.

**Who gets ESBL-producing bacteria?**

ESBL infections are more likely in those who are over 60 years old, have indwelling catheters, or other tubes and have other underlying medical conditions that make them more prone to infections. It is possible that the ESBL-producing bacteria are acquired months or even years before they cause infection. They live harmlessly in the gut until the patient becomes ill or requires antibiotics. ESBLs are usually identified when an individual comes to hospital and a specimen of urine or blood looking for infection is sent to the microbiology laboratory for testing.

**What are the symptoms?**

The symptoms are due to the infections caused by gut related bacteria. The most common infection caused by ESBLs is in the urinary tract, but they can also cause other infections, including blood stream infection.

**Can a person be treated?**

Yes, despite ESBL causing resistance to many antibiotics, there are some that will treat ESBL infections. Patients who are carrying ESBLs in their gut without having symptoms or infection do not require treatment.

**How will I be managed in hospital?**

Good routine infection control practices are the mainstay of preventing spread of ESBL producing bacteria. If you have an ESBL infection or are known to be a carrier of ESBL a number of steps are put into place to reduce the risk of spreading the infection to other patients, including:

- you may be nursed in a single room with your own toilet or commode
- your environment, will be cleaned with disinfectants
- thorough hand washing or use of hand gel should be practiced by all staff, and you will be encouraged to regularly wash your own hands, or use gel especially should wear disposable aprons and gloves when caring for you.

**Prevention**

The best prevention is to maintain good standards of hand hygiene especially after using the toilet or before eating. Careful use of antibiotics is helpful in reducing the resistance developing in bacteria. The Trust has specific protocols on appropriate use of antibiotics.

**Discharge home**

- ESBL infections and their treatment should not delay your discharge from hospital. Some antibiotics to treat the infections require intravenous injections but these can be delivered in the community or by visiting the hospital. When you are home, daily personal hygiene and good hand hygiene practices will reduce the spread of the bacteria. ESBLs do not usually cause infections in otherwise healthy contacts.
- If you require further information or advice, please ask the ward sister or senior nurse or your consultant.
- If you have any further questions, please ask a member of staff or contact the Infection Prevention and Control Team or contact them directly: