



## Infection Prevention & Control

# ESBL

## Extended Spectrum Beta-Lactamase

Information leaflet for patients, visitors and carers

### What are ESBLs?

ESBL stands for **E**xtended **S**pectrum **B**eta **L**actamase. ESBLs are a large family of bacteria (bugs) that usually live harmlessly in the gut of all humans and animals. However, these organisms are also some of the most common causes of opportunistic urinary tract infections, intra-abdominal infections and bloodstream infections.

### Why is it important to know if you are carrying this germ?

- For most patients, ESBLs live harmlessly in the bowel and do not cause infections. ESBL germs are sometimes found during routine investigations. People often feel well with no signs or symptoms of infection and therefore do not require treatment. However, if ESBL producing germs get the opportunity to enter your body they can cause problems. This is more likely to happen in people who are already unwell.

### How can an ESBL be treated?

- Antibiotics are needed to treat ESBL infections.
- If a patient is prone to infection and the infection is caused by ESBLs, it can be more difficult to treat, because many of the most commonly used antibiotics will not work against ESBLs.
- The doctors need to know as soon as possible if a patient is carrying ESBLs so that the most effective antibiotics can be chosen to treat the infection.

### Does carriage of ESBL need to be treated?

- If a person is a carrier of ESBL, they do not need to be treated. As mentioned, these bacteria can live harmlessly in the gut. However, if the bacteria have caused an infection then antibiotics will be required.

### How do people get ESBLs?

- Patients who have already taken lots of antibiotics are more at risk of picking up ESBLs. The reason for this is that the bugs are more exposed to antibiotics, and are therefore more likely to develop “resistance” to that antibiotic, so that antibiotic no longer works.

- ESBLs can be carried by patients, healthcare staff or visitors, either harmlessly or if they have an ESBL infection.
- ESBLs can spread between patients through direct contact with each other or by touching items or surfaces that the person with ESBL has touched, such as bed rails, toilets, or equipment. As patients are much more vulnerable to infection than patients in their own homes, special precautions are required to prevent the spread of ESBLs between patients in hospital.

### **What are the special precautions for patients with ESBLs?**

- Special precautions have been designed to prevent ESBLs spreading between patients on the ward. If you have a positive test result for ESBLs, a careful check will be done to decide if you need to be cared for in an isolation room. If ESBLs are picked up in a wound swab or from urine taken from a urinary catheter or if you have diarrhoea, you may be cared for in an isolation room.
- ESBLs do not cause diarrhoea but because they live in the bowel, they may be spread more easily if you are suffering with diarrhoea.
- Staff will wear gloves and aprons before coming into contact with you to protect their hands and clothes from ESBLs.
- Patients, staff, and visitors must pay special attention to hand hygiene. All staff must clean their hands before and after any contact with every patient, regardless of whether or not they have ESBLs.
- If visitors are helping out with your physical care, nursing staff will advise if extra precautions are required, such as wearing gloves and aprons.

### **How can I help?**

- If you go to the doctor, another clinic, hospital or nursing home, let them know you have had a positive ESBL result. They can then take special precautions to stop ESBLs spreading to other patients who might be more prone to getting an ESBL infection.

### **What happens when I'm ready to leave hospital?**

- You can go home as soon as your doctor says you are ready, even if you have ESBLs. Carrying ESBLs will not affect your discharge. If you go to another hospital or nursing home, your nurse or doctor will let them know about your positive ESBL result so they can prevent it spreading to other patients.

### **What happens when I go home?**

- There is no need to take special precautions at home. People in the community are usually fit and healthy so they are less likely than hospital patients to pick up ESBLs. Clothes, bed linen, and dishes can be washed as usual.

- It is always very important to wash your hands carefully after using the toilet or preparing meals or eating to stop bugs spreading to other people. Clean hands protect you and others from lots of infections, not just ESBLs.
- If you have any concerns you may wish to contact your GP for advice.

### **Will I get rid of ESBLs?**

- Your body may clear ESBLs from the bowel as you recover, but this is not always the case, and may remain in the bowel for some time. Taking antibiotics can encourage ESBLs to grow in the bowel again, so they should only be taken for a very good reason.

### **Where can I find more information?**

The Public Health England web site is another source of information:  
<https://www.gov.uk/government/organisations/public-health-england>

Please do not hesitate to ask the nursing or medical staff caring for you if you have any questions or if you require more information about ESBLs.

We hope that you have found this information useful. If you have any questions or are worried about anything, please speak to the following Dorset County Hospital Staff:

#### **The Infection Prevention and Control Department**

Dorset County Hospital NHSFT  
Microbiology Department  
Williams Avenue  
Dorchester  
Dorset DT1 2JY  
Telephone: 01305 251150  
Direct line: 01305 253279

### **About this leaflet:**

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If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email [pals@dchft.nhs.uk](mailto:pals@dchft.nhs.uk)



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