

Extended-Spectrum Beta-Lactamase (ESBL) Information for patients, staff and relatives



What is ESBL?

ESBL (Extended-Spectrum Beta-Lactamase) are enzymes produced by some bacteria, these enzymes then make the bacteria resistant to some antibiotics. Examples of bacteria which have been found to be ESBL-producing are Klebsiella and Escherichia coli (E.coli).

Klebsiella and E.coli are very common bacteria that normally live harmlessly in the gut, however when detected in other parts of the body they can cause infections (such as urine, blood or chest infections). Most strains of Klebsiella and E.coli are not ESBL producing and therefore infections caused by these can usually be treated easily.

However, when found to produce the ESBL enzyme this makes them more resistant to antibiotics and can make the infections harder to treat.

Where do these ESBL producing bacteria come from?

As with other multi-resistant bacteria (such as MRSA) the overuse of antibiotics has encouraged bacteria to change and become resistant to certain antibiotics.

There is some evidence suggesting they can be found in the faeces of farm animals as well as humans. This means that it is possible that contamination of food e.g. raw meat, by bacteria from animal faeces has led to the infections in humans.

Who gets ESBL producing bacteria?

ESBL producing bacteria can be found in anybody but are most commonly found in persons aged over 65 years old.

ESBL-producing bacteria are most commonly found in urine specimens; often from patients who have had multiple courses of antibiotics for repeated infections.

How are they spread?

People who develop an ESBL producing bacterial infection may have been carrying the bacteria harmlessly in their gut for years and it may be that the bacteria from their own gut has travelled to another part of their body and caused an infection.

It is possible that these bacteria are passed from person to person on contaminated hands (of patients or health care workers).

Infection prevention & control measures

- Hand washing and other infection prevention & control procedures must be enforced.
- Urinary catheter hygiene should be strictly maintained and catheters should be removed/changed as soon as clinically appropriate.
- Where possible, people with an ESBL producing bacterial infection should be nursed in a single room with isolation precautions in place.

Can a person be cleared of an ESBL-producing strain?

Some people may be colonised with (a carrier of) ESBL producing strains for months or years without showing any signs of illness. In this instance, use of antibiotics does not help; antibiotics can treat infections but do not eliminate the ESBL producing bacteria that may be carried in the gut. Good infection prevention & control practices should be enforced at all times for all patients.

Can ESBL infections be treated?

If you are not symptomatic of an infection then antibiotic treatment will not always be required, even in the presence of an ESBL positive result, a clinical assessment will be made in this case.

For the majority of symptomatic ESBL infections there will be antibiotics that can be used to treat the infection. These often may be from a group of antibiotics called 'Carbapenems'.

It is important that if you receive a repeat prescription of antibiotics from your GP (rescue pack for respiratory or urine infections) that this is not re-prescribed without a review by your doctor.

Do I need to be nursed in a single room?

A risk assessment will be made to assess whether it may be necessary for you to be nursed in a single room.

Can I have visitors?

We ask that visitors who are unwell themselves must not visit until they are better. Visitors do not need to wear gloves and aprons but they must wash their hands or use the hand sanitising gel before and after visiting anyone in hospital. This protects patients and prevents the spread of infections to others. If your visitors are going to see another patient on the same day, they should come to see you afterwards.

Please adhere to local infection prevention and control guidance. The Trust reserves the right to refuse or end a visit if safety cannot be maintained.

Who can I speak to if I have further questions?

Please speak to any of the staff who are caring for you.

If the staff are unable to answer your questions or, if you require further information, please ask a member of staff to contact the Infection Prevention and Control Nurse Team on your behalf.

If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on compact disk and in other languages on request. Please contact the Patient Advice and Liaison Service (PALS) on:

Telephone: 01244 366066
or email: coch.patientexperience@nhs.net

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若是你想索取這份傳單的中文譯本，請聯絡「病人預約中心」或向其中一名職員查詢。

Si vous voulez cette brochure en français, contactez le bureau des rendez-vous ou demandez à un membre du personnel.

यदि आप यह परचा हिन्दी में लेना चाहते हैं तो कृपया पेशेन्ट अॅपाइन्टमेन्ट सेन्टर से संपर्क करें या किसी स्टाफ से पूछें।

Haddii aad jeclaan laheyd buug-yarah-an oo af-Soomaali ku qoran la soo xirii xarruunta bukaan ballaminta ama wax weydii xubin shaqaalaha ka tirsan.

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