

ESBL-producing bacteria

Patient information. County Medical Officers' infection prevention sheet.

What is ESBL?

ESBL stands for “Extended-Spectrum Beta-Lactamases”. They are substances (enzymes) that can be produced by intestinal bacteria. These substances break down common antibiotics, such as penicillins. As a result, ESBL-produced bacteria are resistant to such antibiotics. They can, however, be treated with other types of antibiotics *if* they cause an infection. All people have bacteria in their intestines, referred to as the normal intestinal flora. These bacteria are needed to digest food and are important to the immune system. ESBL-producing bacteria are intestinal bacteria that can be part of the intestinal flora for a short or long period of time.

Are there risks associated with ESBL?

The biggest risk of antibiotic-resistant bacteria is not getting the right type of antibiotics to treat an infection. Most individuals with ESBL-producing bacteria are *carriers*, which means they carry them in their intestines without being sick. Being a carrier is not a disease and does not require treatment. ESBL-producing bacteria do not cause illness more frequently than other bacteria. If ESBL-producing bacteria do cause *illness*, it is often a regular urinary tract infection. However, other types of infections are also possible. The difference is that when a person with ESBL-producing bacteria gets an infection, they must be treated with a different kind of antibiotic. This sometimes requires hospital care, rather than just taking medicine at home.

How is ESBL spread?

To become a carrier of ESBL-producing bacteria, they must enter the body through the mouth. A person can become infected through food and water that is contaminated with intestinal bacteria, particularly when travelling abroad. The bacteria can also be spread via the hands after a visit to the toilet. In healthcare facilities, ESBL-producing bacteria can also be transferred between patients from wounds and catheters, primarily via the hands.

Is it possible to get rid of ESBL?

Since the ESBL-producing intestinal bacteria become a part of the normal intestinal flora, a person can carry them for a long time (months to years). It is not possible to predict how long a person will be a carrier of the bacteria, but most gradually get rid of them over time. It is not usually necessary to check a stool sample.

What should you bear in mind?

- Hand hygiene is just as important as it has always been. Wash your hands with soap and water after visiting the toilet and before cooking food/eating meals. Liquid soap is always preferable.
- You do not need to inform anyone in your surroundings that you are a carrier of ESBL-producing bacteria.
- You can live your life as usual and spend time with others. You can also continue your normal sex life.
- If you have a wound, urinary catheter or stoma, it is particularly important that you wash your hands after changing bandages/dressing it. You should also shower instead of taking a bath.
- Similarly, if you have diarrhoea or faecal leakage, you should shower instead of taking a bath.
- If you require antibiotic treatment, it is vital that you get the right kind of antibiotics and that a bacterial culture is taken. For your sake, we therefore ask you to inform your doctor/dentist about your carrier status/previous infection.
- If you are admitted to the hospital, shall undergo surgery or are in sheltered accommodation, it is a good idea to inform the doctor that you have had ESBL-producing bacteria. In healthcare facilities and sheltered accommodation, it is particularly important to have good hygiene and cleaning routines in place to prevent the spread of bacteria.