

ESBL QUESTIONS AND ANSWERS

What is ESBL and how common is it?

Various kinds of bacteria useful to humans (for example, *E. coli* and strains of *Klebsiella* or *Proteus mirabilis*) can be found in a healthy person's intestinal tract and mucous membranes, or in moist areas such as skin folds.

ESBL (Extended-Spectrum Beta-Lactamase) is an enzyme produced by some strains of bacteria. ESBL makes many antibiotics ineffective.

ESBL bacteria have become common in hospitals and healthcare facilities around the world. Cases of ESBL acquired from outside a hospital have also increased world-wide in recent years.

What is meant by "ESBL carrier" and "ESBL infection"?

A person is said to be an ESBL carrier if ESBL producing bacteria have grown in a specimen from his or her body. ESBL bacteria are usually found in the gut, in mucous membranes, or in urine, and cause no symptoms.

ESBL infection means that the bacteria cause infection symptoms and treatment with antibiotics may be needed.

How are ESBL carriers recognized?

ESBL bacteria are most often found when a bacterial culture is done from urine, or sometimes from a wound or from blood or other body fluids due to an infection. They may also turn up when specimens for identifying antibiotic-resistant bacteria are collected from patients who have been hospitalized abroad.

What types of infections are caused by ESBL bacteria, and how are they treated?

ESBL bacteria cause the same kinds of infections as regular gram-negative rod bacteria. ESBL bacteria most commonly cause urinary tract infections, or sometimes a serious systematic infection. Although ESBL bacteria are resistant to many antibiotics, effective antibiotics for successfully treating ESBL infections do exist.

How are ESBL bacteria transmitted?

ESBL bacteria can spread from one person to person by contact. They do not spread by air.

ESBL bacteria can also be acquired during hospital care abroad, or by ingesting contaminated food or drink when traveling.

Why and how are efforts being made to prevent ESBL bacteria from spreading in the hospital?

Efforts are being made to prevent ESBL containing bacteria from spreading in hospitals because the spread of ESBL would make it more difficult to treat infections in seriously ill patients. Good hand hygiene performed by both patients and staff is usually sufficient to prevent ESBL bacteria from spreading. You will receive hand hygiene instructions from staff.

Depending on the type of the bacteria containing ESBL and the type of ward, carriers may need to stay in private rooms and have their own toilet and shower. Staff may wear gloves and other protective gear when treating them.

I was found to have ESBL. What now?

Being an ESBL carrier does not have any kind of impact on normal living (e.g. home, workplace, hobbies, interpersonal relationships).

Just as usual, you should thoroughly wash your hands, using soap, after visiting the restroom and before handling food. If you have any wounds, follow the wound care instructions provided by your doctor. Hands should be washed before and after wound care. Use regular cleaning agents obtained from a store to clean.

ESBL bacteria detected in you will not increase your family members' risk of becoming infected.

Whom should I inform about ESBL carrier status, and how long does it last?

Being an ESBL carrier without symptoms does not require drug treatment, but the proper antibiotic must be selected for the treatment of any infections caused by ESBL bacteria. Therefore, it is important for you to notify the doctor of ESBL carrier status if you are suspected to have a urinary tract infection, for example.

It is not necessary to inform anyone about ESBL carrier status in the workplace, at school, at a day-care center, in recreational settings, or anywhere beyond the healthcare sector.

It is not known precisely how long ESBL bacteria persist in a person's body, but they probably disappear within a few months in most people. If over a year has passed since the ESBL bacteria were found, your ESBL carrier status may be cancelled, in most cases without sampling. This will be decided on a case-by-case basis by an infection control nurse and an infection control doctor.

Was your question not answered above?

Contact the ward where you were treated, the hospital infection control doctor, or an infection control nurse.