

Extended Spectrum Beta-Lactamase (ESBL) Producing Organisms

Important Information for Patients and Visitors

What are ESBLs?

ESBLs are a group of bacteria that are resistant to many commonly used antibiotics. Examples of the most common ESBLs are some types of *Escherichia coli* (*E. coli*), *Enterobacter*, *Acinetobacter*, and *Klebsiella*. ESBL's have the ability to break down beta-lactam antibiotics and are able to transfer their resistant enzymes to other microorganisms.

What is antibiotic resistance?

Antibiotics are medications used to treat infections caused by bacteria. When these medications are no longer able to kill the bacteria, it is called antibiotic drug resistance. Antibiotic drug resistance is a growing problem in the world. This can occur naturally, but it can also occur because of overuse of antibiotics.

How are ESBLs spread?

- ESBLs are often found in the bowel movements of people who are infected or colonized. People become infected when they touch equipment or surfaces that are contaminated with stool and then touch their mouth and swallow the germ.
- ESBLs can also be spread when the germ is on the hands of the patient or the health care worker.

How are ESBLs diagnosed?

- ESBL producing organisms are detected through laboratory tests ordered by your health care provider.

How do we prevent the spread of ESBLs?

- Practice good hand hygiene by washing thoroughly with soap and water or by using an alcohol-based hand rub (ABHR).
- Use **contact isolation** precautions for patients with ESBL infections. A sign will be placed outside the room to alert everyone about the precautions needed. Your health care providers will clean their hands and wear gloves and gowns when entering your room and remove them when exiting your room.
- Equipment is dedicated to that patient if possible.
- Equipment that must go between patients must be sanitized before use on a different patient.

How do you get rid of ESBL's?

If you are colonized (have an ESBL bacteria in your bowel, but show no signs of infection), you will not be treated. You will only be treated if you show signs of infection. Because ESBLs are resistant to many commonly used antibiotics, special types of antibiotics must be used for treatment.

What about my family and visitors?

- Families, visitors, patients and health care staff should be partners in preventing the spread of ESBLs.
- Visitors should clean their hands upon entering and before leaving your room.
- Visitors should wear a gown and gloves to enter and carefully remove upon exit.
- Visitors should not visit or have contact with other patients while in the hospital.

What are the risk factors for acquiring an ESBL infection?

- Recent stay in ICU/NICU
- Weakened immune system
- After transplant surgery
- Premature birth
- Frequent/long term antibiotic therapy
- Indwelling urinary catheter present
- Surgical procedures

Everyday tips for when you go home:

Good hand hygiene

The key to preventing the spread of germs is frequent and thorough hand hygiene. Everyone including those in the household should use ABHR or soap and water. Hands should be washed well for at least 15 seconds when using soap and water. Hand hygiene should be done before and after contact with the patient or any items that they have touched. Hands should also be washed before preparing or eating food.

Toileting/Grooming

Wash your hands thoroughly with soap and water after using the bathroom. The toilet should be cleaned daily with a clean cloth and disinfectant such as Lysol or a bleach solution. Always discard the cloth when done.

Household cleaning / Laundry

Clean surfaces in bathrooms, kitchens, and other areas on a regular basis with household detergent/disinfectants such as Lysol or a bleach solution. Do not share dishes, utensils or food with anyone. Clothing, bed linens and towels should be washed separately in hot water with detergent and dried using the "hot" setting on the dryer.

If you have any questions or concerns please contact: Infection Prevention - 585-275-7716

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