

What is ESBL ?

ESBL stands for Extended Spectrum Beta-Lactamase, an enzyme (protein) made by some bacteria which prevents certain antibiotics from working. Bacteria that are able to produce this enzyme are more resistant to many of the antibiotics prescribed to treat infections, thus making an infection caused by an ESBL bacteria more difficult to treat.

Bacteria that contain ESBL enzymes are usually found in the bowel, where they do not typically cause problems (known as colonization). They are no more likely to cause infection than other bacteria found within the bowel.

These bacteria are sometimes found during routine investigations. People often feel well with no signs or symptoms of infection and therefore do not require treatment. However, there is always the possibility that ESBL producing bacteria within your body can cause problems. This is more likely to happen in people who are already unwell.

How is ESBL spread ?

It is difficult to say exactly where you may have acquired an ESBL producing bacteria. Some people come into hospital already carrying it; some acquire it from previous treatments or hospital stays; some from contact with staff, other patients or visitors and some acquire the organism when travelling. People with urinary catheters and those who are taking antibiotics are more at risk of acquiring ESBL.

How would I contract ESBL ?

ESBL has been found in the community and in health care settings, on people and their surroundings. Healthy people are at low risk of acquiring ESBL. Some may be at a higher risk if they have:

- frequent hospitalizations;
- frequent use of antibiotics;
- urinary catheters in place;
- compromised or broken skin; and
- a lowered immune-system (e.g. diabetes, infection).

The spread of ESBL in a hospital can occur through contact with another person that has ESBL or on the hands of health care workers.

What precautions are used in the hospital ?

If a patient is found to have ESBL while in hospital, additional precautions are taken to reduce the risk of it spreading to other patients. These precautions include:

- A sign on the patient's door informs staff and visitors that additional precautions are required;
- Staff who enter the room use of gowns and gloves to provide close care;
- The room, and equipment used in the room, is cleaned and disinfected regularly, with some equipment dedicated only to the patient; and
- A toilet or commode is designated for the patient's use only.

Patients with ESBL are asked not to visit the cafeteria and other public areas of the hospital. They may be asked to remain primarily in their rooms, other than for tests or procedures. In some cases of respiratory illness, patients are required to wear a mask outside the room



Extended Spectrum Beta-Lactamase

*Always wash
your hands
well with soap
and water,
particularly
after going to
the toilet and
before eating
food.*



What about family and visitors ?

Family and friends are encouraged to visit and can safely have close contact with a patient including hugging, kissing and handholding, as normal. All visitors must clean their hands before entering and after leaving the room.

- Visitors are not required to wear a gown or gloves, unless they are helping with the patient's care. Visitors must not assist or visit other patients.
- Visitors must use public washrooms only, not patient washrooms.

How can I help ?

Perform hand hygiene:

- Before: eating, drinking and entering/leaving a patient room;
- After: using the bathroom or blowing your nose; and
- Before & After: touching a dressing or wound or applying personal care products.

Hand hygiene is:

- Washing with soap and water OR rubbing with an alcohol-based hand sanitizer;
- Washing hands when they are visibly soiled; and
- Turning taps off and opening bathroom doors with a paper towel.

What about future admissions ?

On any future admissions to hospital, additional precautions may be taken - and you may be checked again for the presence for ESBL.

Patients should notify other health facilities or providers that they were on precautions for ESBL, in the event similar precautions need to be taken.

What precautions should be used at home ?

If a person has ESBL at the time of discharge from hospital, the chance of spreading the bacteria to others is very small. ESBL is no more infectious than other bacteria that people carry in their bowel and are exposed to every day; however, people with ESBL should tell any health care providers that they were on precautions for ESBL.

People with ESBL can carry on with usual activities, ensuring they wash their hands after going to the bathroom or touching their wound/catheter. This practice should be a matter of routine and not just for ESBL. It is good to remind everyone to wash their hands often.

Recommended practices at home:

- Everyone who helps with personal hygiene or toileting should wash their hands afterwards;
- Clean hands before the preparation of any food and before eating;
- Clean hands well after using the toilet, and encourage family members to do the same;
- Do not share personal items that touch the skin such as razors, towels or bar soap;
- Clothing may be laundered in the same manner as the rest of the household laundry; and
- No special cleaning of furniture or dishes in the home is required.

What is the difference between colonized and infected?

Colonization: The bacteria is present but the patient is well and not feeling ill.

Infection: The bacteria is present and results in the patient having signs of infection (fever, swelling, pain, discharge, etc).

Can my washing be sent home?

Yes. Laundry can be taken home and washed as usual. Where possible, wash laundry on a separate cycle at the highest temperature the fabric will tolerate. Hands should be washed with soap and water after handling soiled clothing.

Disclaimer: This fact sheet provides basic general information only and is to be used as a quick guide, not as a complete resource on the subject. If you have any further questions, ask Infection Prevention & Control, your family doctor or health care worker.

For more info, visit:

www.viha.ca