

Extended-Spectrum Beta-Lactamase (ESBL)

Patient Information Fact sheet

What is ESBL?

Extended Spectrum Beta Lactamase (ESBL) is an enzyme produced by some bacteria which makes them resistant to certain antibiotics. This can mean less treatment options when somebody has an infection. Most people who have an ESBL (usually these bacteria live in the bowel) experience no symptoms or illness at all - this is called being 'colonised'.

ESBL **infection**, however, means the bacteria is causing symptoms and/or illness. For example, a urinary tract infection or, uncommonly, a more serious infection of the blood or lungs can occur.

Who is at risk of ESBL colonisation/infection?

If you are in hospital you are more at risk of infection as your normal body defence mechanisms may be weakened by illness, surgery, drugs and procedures. In general, healthy people do not usually get ESBL infections, and cleaning your hands properly (Hand hygiene) means the risk is even less.

How is ESBL spread?

ESBL are usually spread person to person through contact with infected or colonised people mostly from contaminated hands or indirectly from contaminated surfaces or medical equipment. With good hygiene practices, especially hand hygiene, the risk to others in the household is small. ESBL is no more infectious than other bacteria people can have and are exposed to every day.

Can ESBL be treated?

While ESBL producing bacteria are resistant to many of the commonly used antibiotics, there are still options for treatment should an infection develop. If you are colonised with ESBL-producing bacteria and you do not have an infection, antibiotics are not required and should be avoided.

To prevent the spread of ESBL

While in hospital

Early detection through screening (testing) can prevent spread in hospital. Ask staff if you would like to know more information.

In addition to the usual hygiene practices, such as staff regularly cleaning their hands, ESBL spread can be prevented by:

- Placing you in a single room/ensuite
- Placing a sign on your door to alert staff to take special precautions. For further information please read our fact sheet – 'Why am I in Isolation?'
- Staff wearing gowns and gloves when they care for you
- Placing an alert on your file – this is to alert staff to take extra precautions
- Asking visitors to wear gowns and gloves
- Regular cleaning of your room and dedicated equipment

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To prevent the spread of ESBL

While in hospital

- Do not share towels, face cloths, eating utensils, personal items e.g. toothbrushes
 - Always clean your hands before eating and after using the toilet
 - Clean your hands before leaving your room. Ask staff if you would like more information
 - Ask visitors to clean their hands before and after visiting you
 - Visitors must not use your bathroom or sit/lie on your bed
 - Expect all healthcare workers to clean their hands before and after contact with you
 - Ask questions of your healthcare team so you can understand about ESBL
- If you are required to leave your room for treatment under the direction of your nurse clean your hands before leaving your room. Wounds or invasive device must be securely covered to ensure there is no leakage of any body fluids. Ask staff if you would like more information

To prevent the spread of ESBL

When at home

- Carry on with usual activities, such as cleaning your hands before preparing/eating food, after using the toilet, touching any wound or medical device. Appropriate hand hygiene should be routine and not just for ESBL.
- Anyone who helps you with personal hygiene should practice good hand hygiene like they would normally
- No additional separate household facilities are required
- No special cleaning of furniture, dishes/utensils or linen is required
- Unless instructed otherwise by your doctor, do all your normal activities paying particular attention to hand hygiene. I.e. normal everyday contact, including intimacy and close contact is acceptable
- Take antibiotics only as prescribed
- Inform doctors or healthcare providers that you have ESBL and follow their instructions

Will I always have ESBL?

While infections may be treated, people who are colonised with an ESBL may carry this in the bowel (gut) for many years. In some people, ESBL bacteria disappear from the bowel over time and these people are said to have cleared their own ESBL or have become 'decolonised'.

Where can I get more information?

This fact sheet is a quick guide only. If you have further questions please ask your family doctor or nurse for assistance. They will be able to help you search the information you require.

You can also visit the Ministry of Health website for more information:

<http://www.health.govt.nz/system/files/documents/publications/guidelines-for-control-of-multidrug-resistant-organisms-dec07.pdf>

Healthline is a free telephone health advice service for all the family: Tel 0800 611 116