

ESBL

Extended Spectrum Beta-Lactamase Producing Organisms

What is ESBL?

ESBL stands for Extended Spectrum Beta- Lactamase. It is an enzyme made by some bacteria which prevents certain antibiotics from working. Bacteria that are able to produce this substance are more resistant to commonly prescribed antibiotics. This makes infection more difficult to treat: however, there are still some effective antibiotics available.

Infection from ESBL producing bacteria occurs mainly in urine, but also may infect wounds and the blood. Sometimes these bacteria can be in your body (usually your gut) and not make you sick. This is called colonisation instead of infection, as you feel well with no signs or symptoms of infection.

ESBL was first reported in Europe in 1983. In Australia, the most common bacteria to produce the enzyme are Klebsiella pnuemoniae and E coli.

Why is it important to know if you are carrying these bacteria?

ESBL bacteria are sometimes found during routine investigations. Most people often feel well and show no signs or symptoms of infections so do not require treatment.

However, if ESBL producing bacteria enter your body they can cause some problems. If your doctor knows that you carry this germ he can prescribe an effective antibiotic at the earliest opportunity should it be required.

Staff caring for you or your relative will also be aware that they must take extra precautions to prevent the spread of the bacteria to other patients.

How is it spread?

From patients already carrying the germ.

On the hands of health care workers who have not washed their hands correctly.

It is difficult to say where you may have acquired an ESBL producing germ.

Like most germs, ESBL producing bacteria may be spread by faecal contaminated hands or equipment that has not been cleaned properly leading to the bacteria being introduced into the mouth.

How can we stop it spreading?

People in hospital are more at risk of infection because their body defence mechanisms are weakened by illness, surgery, medications and procedures.

Hand washing is the single most effective method of preventing the spread of any bacteria. It is particularly important to wash hands thoroughly before eating, drinking, or preparing food and after using the toilet.

Staff, patients and visitors should all wash hands on entering the room and leaving the room.

Staff will wear gloves and aprons when assisting you in any personal care.

It is also important that antibiotics are prescribed only when needed so as to reduce resistance developing in the bacteria.

Is it treatable?

By being aware that you have an ESBL producing bacteria your doctor will be able to prescribe the most appropriate antibiotic if you develop an infection.

People do not have to stay in hospital until ESBL producing bacteria has cleared, you will be sent home when your general condition allows, regardless of whether you are still positive for ESBL or not.

Are some people more at risk than others?

Hospitalised patients appear to have the greatest risk of acquiring this infection.

Most infections have occurred in people who have other medical problems who are unwell and in the elderly population. Those who have been taking antibiotics or who have previously been in hospital are mainly affected.

Can I have visitors?

Your family and friends can still visit, but it is important they wash their hands when they arrive and before they leave. They do not need to wear gloves or aprons unless they are helping with personal care.

Visitors please do not sit or lie on the bed. Visitors are advised not to visit if they have a cough or cold, diarrhoea, vomiting, boils, open wounds or weeping lesions.

Visitors are also advised not to visit other patients in other parts of the hospital/wards.

How do we know when ESBL producing bacteria is no longer a problem?

A swab of your groin or rectum will be taken in the hospital and tested to see if ESBL producing bacteria are present. When there is a negative result it is no longer considered a problem.

What happens when I go home?

You may be discharged before your infection has completely gone.

The community nurse will be asked to attend if you still require dressings.

The infection will not affect your family and friends when you are at home. Usual personal hygiene is enough and usual household cleaning is sufficient.

Restrictions to activities or visitors are not necessary unless your medical condition warrants it or you have been advised by your consultant to withhold activities for a certain amount of time post surgery.

Please remember to keep your outpatient appointment if you have one.

Watch for signs of infection, if your wound becomes red, swollen or oozes, or if you have a fever please see your local GP for advice.

If you have any other questions please do not hesitate to see staff on the wards.

This information brochure is based on North Queensland Mater Health Service's 'Extended Spectrum Beta-Lactamase Producing Organisms ESBL Information Sheet for Patients and Visitors'.

