

# Extended Spectrum Beta Lactamase (ESBL)

## Fact Sheet

### What is ESBL?

ESBL's are enzymes that may be produced by some bacteria that are usually found in the bowel and urinary tract, such as E.coli. The bacteria can also infect or colonise other sites of the body e.g., lungs and sputum. ESBL's are considered multi-resistant organisms (MRO) due to the large number of antibiotics the bacteria are resistant to. It is therefore important to control the spread of ESBL's to ensure that the bacteria will still respond to commonly used antibiotics.

### What is the difference between infection & colonisation?

**Infection** means that bacteria (germs) are in or on the body and makes you sick, which results in signs and symptoms such as fever, pus from a wound, diarrhoea or pneumonia.

**Colonisation** means you carry the bacteria in or on your body, but you do not become sick. People who are colonised will not have signs or symptoms. Colonised patients are sometimes given treatment to prevent infection developing.

Both colonised and infected people can spread the bacteria to other patients.

### Who is at risk from ESBL infections?

ESBL infections can occur in people who are

- Elderly – especially from nursing homes.
- Have a low immunity
- Have broken skin from wounds
- Have undergone recent Surgery
- Have indwelling devices such as urinary catheters, intravenous lines (drips), and feeding tubes
- Emergency intra-abdominal surgery
- Have a prolonged ICU or hospital stay
- Have received frequent and / or long-term antibiotics.
- Suffer from chronic urinary tract infections / cystitis
- Recent overseas travel

- Recent overseas hospital treatment/admission

### How can ESBL's be spread?

Both can be spread by touching the skin of an infected or colonised person (Direct Contact), or by touching a surface (Indirect Contact) that has the bacteria (germs) on it, for example hospital beds, tables, shared equipment.

### How will my care change whilst in hospital?

- You will be managed using special infection control precautions until you are discharged.
- A sign is placed outside your door to alert hospital staff for the need to use special protective infection control precautions. This sign also alerts visitors of the need to speak with nursing staff prior to entering your room.
- The hospital staff will wear protective clothing such as gloves and an apron or gown when they enter your room. If the ESBL has been found in your sputum the staff may also need to wear a mask. These items are disposed of in a separate waste bin as the staff member leaves your room.
- You will be allocated a private room with your own en-suite facilities. We ask that your movement throughout the ward is limited to essential movement only, such as physiotherapy. If you are unsure about when you can leave your room, please speak to the nursing staff.
- You may be asked to wash or shower with a special soap during your hospital stay; the nursing staff will provide this. It is no longer necessary for you to use this soap once you have gone home.

### Good Hand Hygiene Practices

Hand Hygiene is the most effective way to prevent **ALL** infections, including the flu and the common cold. Encourage your family and friends to maintain good hand hygiene practices every day.

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Please refer to the hand hygiene information in the patient information booklet or hand hygiene leaflet available from the Infection prevention and control team.

### Alternative - Alcohol based hand rub / gel.

During your stay in hospital you may have seen the staff using an alcohol-based hand rub, as an alternative to soap and water. Alcohol-based hand rubs or gels can be used for hand hygiene as long as your hands are not visibly soiled / dirty. There are a variety of brands on the market and are available for purchase at most pharmacies. You may choose to use this type of product at home.

### Can I still have visitors?

Yes – you can still have visitors. In general, exposure to ESBL does not cause infection in healthy people; this includes pregnant women, babies, and children. **Casual contact such as hugging, and kissing is OK.** Being diagnosed with ESBL does not prevent you from continuing sexual relations with your partner, unless otherwise advised by your doctor. If a friend or relative has had recent surgery, has an illness, or has a compromised immune system they may wish to contact the Infection Control staff or speak with their GP for further advice. To prevent the spread of ESBL the nursing staff will provide education to your visitors about the need to perform hand hygiene before and after they enter your room. We ask that you also encourage your visitors to do this. They can use both soap and water at the wall sink in the ward, or the alcohol hand rub provided outside your room.

### What happens when I get home?

When you return home, it is important for you, your family, and your friends to continue the good hand hygiene practices that you have been taught in hospital.

There are no special precautions required for the washing of clothes, linen, crockery, and cutlery or

for the cleaning of the bath, toilet, and shower.

**It is important that you always tell your doctor, nurse, paramedic, or other health care provider that you have previously had ESBL. This will help to prevent the future spread of ESBL.**

### Where can I get further information?

Talk to your doctor or the nurses caring for you. If you wish to speak with the Infection Control department, ask your nurse to contact us. Our office hours are 8am to 4pm Monday to Friday. Our contact numbers are:

- Office: (02) 9480 9433
- Office: (02) 9480 9732

### References

NSW Dept of Health; Infection Prevention and Control Policy PD2017\_013

National Health and Medical Research Council; Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019)

South Australian Government, Dept of Health; Factsheet for Extended-spectrum beta-lactamase (ESBL) producing bacteria (Version 1.4, February 2018)

Centers for Disease Control and Prevention (CDC); ESBL-producing Enterobacteriales in Healthcare Settings (November 22, 2019)