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## ESBL<sub>CARBA</sub>-producing bacteria, patient information

County Medical Officers' infection prevention sheet.

### What is ESBL<sub>CARBA</sub>?

ESBL<sub>CARBA</sub> means "extended spectrum beta lactamases with carbapenemase activity". They are substances (enzymes) that can be produced by intestinal bacteria. These substances break down most common kinds of antibiotics. As a result, ESBL<sub>CARBA</sub>-producing bacteria develop resistance to such antibiotics. They are therefore significantly more difficult to treat **if** they cause an infection. Everyone has bacteria in their intestines, referred to as the normal intestinal flora. They are needed to digest food and are important to the immune system. ESBL<sub>CARBA</sub>-producing bacteria are intestinal bacteria that can be part of the intestinal flora for a short or long period of time.

### Are there risks associated with ESBL<sub>CARBA</sub>?

The biggest risk associated with antibiotic-resistant bacteria is not getting the right antibiotics to treat an infection. Most individuals with ESBL<sub>CARBA</sub>-producing bacteria have them in the intestines without being sick and are referred to as **carriers**. Being a carrier is not a disease and does not require treatment. ESBL<sub>CARBA</sub>-producing bacteria do not cause illness more frequently than other bacteria. However, if ESBL<sub>CARBA</sub>-producing bacteria do cause an **illness from infection**, normal antibiotics cannot be used. A person must therefore normally be admitted to hospital for treatment.

### How is ESBL<sub>CARBA</sub> spread?

For a person to become a carrier of ESBL<sub>CARBA</sub>-producing bacteria, they must enter the body through the mouth. A person can become infected through food and water that is contaminated with intestinal bacteria, particularly when travelling abroad. The bacteria can also be spread via the hands after a visit to the toilet. In healthcare facilities, ESBL<sub>CARBA</sub>-producing bacteria can be transferred between patients from wounds and catheters, primarily via the hands.

### Is it possible to get rid of ESBL<sub>CARBA</sub>?

Since the ESBL<sub>CARBA</sub>-producing intestinal bacteria become a part of the normal intestinal flora, a person can carry them for a long time (months to years). It is not possible to predict how long a particular person will be a carrier of the bacteria, but most people are likely to get rid of them over time. It is not usually necessary to check a stool sample.

### What should you bear in mind?

- Hand hygiene is just as important as it always has been. Wash your hands with soap and water after visiting the toilet and before cooking food/eating meals. Liquid soap is always preferable.
- You do not need to inform anyone around you that you are a carrier of ESBL<sub>CARBA</sub>-producing bacteria.
- You can live your life as usual and spend time with others. You can also continue your normal sex life.
- If you have a wound, urinary catheter or stoma, it is particularly important that you wash your hands after changing bandages/dressing it. You should also shower instead of taking a bath in a bathtub/pool.
- If you have diarrhoea or faecal leakage, you should also shower instead of taking a bath in a bathtub/pool.

09/05/2014

- If you require antibiotic treatment, it is vital that you get the right kind of antibiotics and that a bacterial culture is taken. For your own sake, we therefore ask you to inform your doctor/dentist about your carrier status/previous infection.
- If you are admitted to hospital, are to undergo surgery or are in sheltered accommodation, it is a good idea to inform the doctor that you have had ESBL<sub>CARBA</sub>-producing bacteria. In healthcare facilities and sheltered accommodation it is particularly important to have good hygiene and cleaning procedures in place to prevent the spread of bacteria.