Frequently Asked Questions
“Extended-Spectrum Beta-Lactamases (ESBLs)
Producing Organisms”

What is it?

- ESBLs are enzymes that may be produced by certain bacteria known as gram negative bacteria. This enzyme allows the bacteria to become resistant to certain antibiotics, which means the antibiotics no longer work to kill the bacteria. The most common ESBL producing bacteria include *Klebsiella species*, *Enterobacter species*, *Acinetobacter species*, and *Escherichia coli*.

Who is most at risk?

- Recent patient in an ICU
- Immunocompromised patients
- Post transplant patients
- Premature babies
- Patients who have had frequent/long term antibiotic treatment
- Patients with indwelling urinary catheters
- Patients who undergo surgical procedures

How is it spread?

- ESBL producing bacteria usually live in a persons gut without causing signs of infection or problem. This is called colonization.
- They are spread by the fecal-oral route from people not properly using hand hygiene. Contact with contaminated hands or items/equipment that has been touched by contaminated hands spread the organism.

Can the infection be treated?

- When an infection is caused by an ESBL producing bacteria, multiple rounds of antibiotics may be given in order to find the effective antibiotic or combination of antibiotics for the patient.
- No treatment is recommended for colonization at this time as the organism is not causing the patient a problem. Treatment is for an infection.

What hospitals can do to prevent transmission?
Patients are placed on Contact Precautions. The Contact Precautions card is located on the patient’s door and above the patient’s bed and tells everyone who enters the room what precautions to take when entering such as performing hand hygiene with soap and water or an alcohol based hand sanitizer and wearing a gown and gloves. Hand hygiene, prior to and after attending to the patient is essential and must be done before putting on gloves and after glove removal. Hospitals monitor and control the usage of antibiotics to reduce resistance of bacteria.

What can I do to prevent infections?

- Only take antibiotics for bacterial infections as they are not effective against fungi and viruses.
- If prescribed an antibiotic, take as directed and until completed.

References
