WHAT IS CRE?
Enterobacteriaceae are a family of bacteria, many of which live naturally in our bowels. Carbapenem-resistant Enterobacteriaceae (CRE) produce carbapenemase enzymes that can break down many types of antibiotics, making the bacteria very resistant. In Canadian hospitals, there are currently few infections with CRE, but caution is still needed to prevent their increase and spread.

HOW IS CRE SPREAD?
Most people who carry CRE have no symptoms of infection and are said to be colonized. The main site of colonization of CRE is the bowel. CRE is not spread through the air, but may survive on equipment and surfaces, such as bedrails, tables, chairs, countertops and door handles. CRE can be spread from one person to another by unwashed hands or from contact with soiled equipment and surfaces. Infection occurs when CRE enters the body at specific sites and causes symptoms of disease. For example, CRE can cause pneumonia and urinary tract infections. Since CRE are resistant to many types of antibiotics, treatment is difficult and may involve antibiotics which have significant side effects.

DOES CRE GO AWAY?
People who have CRE in their bowel will likely carry it for a long time. You do not need treatment unless CRE infection (i.e. pneumonia, UTI) develops.

WHO IS AT RISK FOR CRE?
Currently, the major risk factor is receiving health care in settings that have CRE, e.g., hospitals along the U.S. eastern seaboard (particularly New York City), Greece, Israel and the Indian subcontinent. CRE outbreaks have been seen in hospitals around the world, including Canada. People coming from the Indian subcontinent, with or without exposure to health care, are also at risk.

WHAT SPECIAL PRECAUTIONS ARE REQUIRED FOR CRE?
Your healthcare team will continue to provide the same level of patient care. If a patient/resident is identified with CRE, roommates and patients in close proximity will be screened for CRE. Special precautions will be used to prevent the possible spread of the bacteria. For example:

- You may need to be moved to a single room
- A sign will be placed on your door to remind others who enter your room about the special precautions (i.e. instructions to wash hands, wear gown and gloves)
- The room and the equipment used in the room will be cleaned and disinfected regularly
- Speak to your doctor or nurse about special instructions when leaving your room
- Everyone who leaves your room must clean their hands well, including you
- Your hospital record will indicate CRE

WHAT ABOUT FAMILY/VISITORS?
Your family and visitors may visit you. Visitors are allowed as long as they follow the directions on the sign and report to the nursing station before entering the room. When
your family and friends visit, they should not assist other patients with their personal care as this may cause the bacteria to spread. They will be required to wear a long-sleeved gown and gloves while in your room.

- All visitors must be instructed by the staff on how to use Contact Precautions.
- Children and infants should be closely supervised.
- We ask that your visitors only visit you and your room, and to do the following: Visitors must not access the kitchen after they have been in your room. Your healthcare provider will help them if they need kitchen facility and they have already been in your room.
- Food items from home should be single portions. Once food containers enter your room, they cannot be placed in the fridge in the common kitchen on the unit
- Visitors can access the kitchen to place items in the fridge if they have not yet entered your room during their visit.
- Visitors must clean their hands before entering your room with alcohol foam rub
- Visitors must not use your bathroom
- Visitors should not to eat or drink in your room
- Before leaving your room, visitors must remove the gloves and gown and dispose of them in the garbage container and the linen hamper located in your room.
- Visitors must clean their hands upon leaving room with alcohol foam rub

**GOOD HAND HYGIENE PRACTICES:**
Remind all staff and visitors to practice good hand hygiene before and after they touch you. Ask your nurse or doctor to demonstrate proper hand hygiene techniques (15 seconds of soap and running water, turning off taps with paper towels used to dry hands OR alcohol-based hand rub until hands are dry).

**You need to clean your hands:**
- After using the bathroom
- After blowing your nose
- Before eating and drinking
- Before touching and after you touch your dressing or wounds
- When your hands are visibly dirty (soiled) use soap and water to wash hands
- Before you leave your room in hospital

**WHAT WILL HAPPEN AT HOME?**
If you have CRE at the time of discharge from hospital, the following practices are recommended:
- Everyone who might help you with your personal care or with going to the toilet should wash their hands after contact with you as they normally do
- Wash your hands before you make any food and before you eat. This practice should be followed by everyone in the household.
- Wash your hands well after using the toilet as you normally would.
- Bathroom hand towels can be shared however should be exchanged for clean towels more often than your normal practice
- Clothing may be laundered in the usual manner, and along with, the rest of the household laundry.
- No special cleaning of furniture or items (e.g. dishes) in the home is required.
• If you share a bathroom at home, clean the toilet and sink at least weekly with a household cleanser as you normally would.
• Always tell your physician, paramedics, nurses or other care providers that you have CRE. This helps prevent spread to others and helps your doctor choose the right antibiotics if necessary.

Adapted from Annex A: Screening, Testing and Surveillance for Antibiotic-resistant Organisms (AROs)