Carbapenemase Producing Enterobacteriaceae (CPE)

What Is CPE?

Carbapenemase is an enzyme that does not allow bacteria to be killed by certain antibiotics. This is called resistance. CPE infections are more difficult to treat since there are fewer antibiotics able to be used for treatment. People that have CPE and do not have an infection are called carriers. It may also be referred to as Carbapenem Resistant Enterobacteriaceae (CRE) or Carbapenemase Producing Organism (CPO).

How Is CPE Spread?

CPEs are spread from one person to another by contact usually on the hands, especially when their hands are not washed after using the bathroom. This can be stopped by good hand cleaning. Bacteria with CPEs can also live on objects such as toilet seats, taps, door handles, catheters and bedpans. CPEs are killed with the use of disinfectants.

What Special Precautions Are Required for CPE? What Do I Need to Know?

Together we can take steps to stop the spread of CPE to other patients in the hospital:

- You will stay in a room by yourself;
- Everyone who cares for you or visits you will wear gloves and a long-sleeved gown;
- A sign for "Contact Precautions" will be placed on your door to remind everyone who enters your room about the special steps;
- Your room and the equipment used in your room will be cleaned and disinfected regularly;
- Everyone who leaves your room will clean their hands; and
- You will clean your hands and wear clean clothes or a clean hospital gown before you leave your room.

What About My Family and Visitors?

Family and friends can still visit you in the hospital. The signs outside your room will show how to safely wear the gloves and gowns. Before leaving your room, your family and visitors must remove the gloves and gown. Then, they must clean their hands with alcohol hand rub. We ask that your family and visitors not assist other patients. Instead, they can assist by using the call bell to ask for help.

What Is the Treatment for CPE?

No treatment is necessary for people who are carriers of CPE. Giving an antibiotic when there is not an infection can make the bacteria even more resistant. If you have an infection with CPE, there are specific antibiotics to treat your infection.

Good Hand Hygiene Practices

Our staff welcomes reminders to clean our hands. We invite you to ask anyone who enters your room to clean their hands before and after they touch you. Ask any staff member to show you good hand cleaning (20 seconds of soap and running water OR waterless alcohol hand rub for 20 seconds until hands are dry). Please clean your hands often and ask for help to clean your hands if needed:

- After using the bathroom;
- After blowing your nose;
- Before eating and drinking;
- Before and after you touch your dressing or wounds;
- When your hands are visibly dirty; and
- Before you leave your room.

What Will Happen at Home?

If you have CPE when you leave the hospital, the chance of spreading the bacteria to your family is small. We recommend the following:

- Everyone who might help you with your personal hygiene or with going to the toilet should wash his or her hands after contact with you.
- Clean your hands before you make any food and before you eat. Everyone in the household should follow this practice.
- Wash your hands well after using the toilet. Make sure others that use the bathroom wash their hands well afterwards.
- Clothing may be laundered in the same manner as the rest of the household laundry.
- No special cleaning of household surfaces, furniture or dishes is required. Household disinfectants are effective.
- Always tell your physician, paramedics, nurses or other care providers that you have CPE to stop its spread.

Questions? Infection Prevention and Control department 519-464-4400 Ext. 5253.

References:
Provincial Infectious Disease Advisory Committee (PIDAC) guidelines, Annex A: Screening, Testing and Surveillance for Antibiotic-Resistant Organisms (AROs) CPE Information Sheet (2013)
https://www.publichealthontario.ca/en/eRepository/RPAP_Annex_A_CPE_Information_Sheet_2013.pdf