

# Carbapenemase-producing Enterobacteriaceae (CPE)

## Information sheet for patients and visitors

This tool is an excerpt from the [Annex A: Screening, Testing and Surveillance for Antibiotic-Resistant Organisms \(AROs\)](#) (Appendix C) and was reformatted for ease of use.

For more information please contact Public Health Ontario's Infection Prevention and Control Department at [ipac@oahpp.ca](mailto:ipac@oahpp.ca) or visit [www.publichealthontario.ca](http://www.publichealthontario.ca)

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## What are CPE?

*Enterobacteriaceae* are a family of bacteria, many of which live naturally in our bowels. Carbapenemase-producing *Enterobacteriaceae* (CPE) 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 CPE, but caution is still needed to prevent their increase and spread.

## How are CPE spread?

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

## Does CPE go away?

People who have CPE in their bowel will likely carry it for a long time. You may be treated if CPE is causing symptoms of infection.

## Who is at risk for CPE?

Currently, the major risk factor is receiving health care in settings that have CPE, e.g., hospitals along the U.S. eastern seaboard (particularly New York City), Greece, Israel and the Indian subcontinent. CPE 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 CPE?

Your healthcare team will continue to provide the same level of patient care. If a patient/resident is identified with CPE, roommates and patients in close proximity will be screened for CPE.

Additional 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 may 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)
- 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 CPE

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## What about family/visitors?

Family and visitors can visit you. Healthy family and visitors have a low risk of acquiring infection with CPE. All visitors must be instructed by the staff on how to use Additional Precautions. Children and infants should be closely supervised. We ask that your visitors only visit you and your room, and to do the following:

- Clean their hands before entering your room and when leaving
- Not to use your bathroom
- Not to eat or drink in your room

## 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 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 and after you touch your dressing or wounds
- When your hands are visibly dirty (soiled)
- Before you leave your room

## What will happen at home?

- It is important to wash hands often at home for fifteen seconds each time, especially after using the bathroom and before preparing food.
- No special cleaning of items in your home (e.g., dishes) are required.
- Clothing may be laundered in the usual manner, along with the rest of the household laundry.
- If you go to another health care facility, visit another doctor or have Home Care services you should tell them that you have CPE. They may use Additional Precautions when providing care, which will help prevent spread to others and helps your doctor choose the correct antibiotic treatment.