



---

PATIENT & CAREGIVER EDUCATION

# Carbapenem Resistant Enterobacteriaceae (CRE)

This information explains what carbapenem resistant enterobacteriaceae (kar-buh-PEH-nuhm reh-ZIH-stunt en-teh-RAH-bak-TEER-ee-uh-see-ay) is. Carbapenem resistant Enterobacteriaceae is also called CRE. It also explains how it spreads and how infections are treated.

## What is CRE?

CRE is a family of bacteria (germs) that are hard to treat because they are resistant to antibiotics. This means that certain medicine or treatments won't work or may be less effective.

CRE can cause illness, including:

- Urinary tract infections (UTIs)
- Pneumonia
- Blood infections
- Wound infections

## What is the difference between being colonized and being infected with CRE?

### Colonized

If you are colonized with CRE, the germ is on your skin or in your body. You will not have any symptoms.

# Infected

If you are infected with CRE, the germ is on your skin or in your body. You will have symptoms.

## How CRE spreads

Most CRE infections are spread by direct contact with an infected person's bodily fluids. These include:

- Blood.
- Drainage from a wound.
- Urine (pee).
- Bowel movements (poop).
- Sputum (thick mucus you cough up).

It can also spread by touching equipment or surfaces that have come in contact with the germ. Casual contact, such as touching or hugging, does not spread CRE.

## Risks of CRE

You're more likely to get a CRE infection if you:

- Have a weakened immune system.
- Have chronic illness, such as cancer or diabetes.
- Have been treated with certain antibiotics over a long period of time.
- Had a recent surgery.
- Have had repeated or long stays in the hospital.
- Have open wounds or sores.
- Have invasive medical devices in your body, such as breathing tubes, feeding tubes, catheters in a vein, and urinary catheters.

# Symptoms of a CRE infection

Your symptoms will depend on the type of infection you have and where it is. If the infection is in your lungs, you may have coughing or shortness of breath. If the infection is in your urinary tract, you may have pain when you urinate (pee).

## How to treat CRE infection

CRE infections are treated with antibiotics that are not resistant to the germ.

## How to stop a CRE infection from spreading while you're in the hospital

Isolation precautions are steps we take to stop infections from spreading from person to person. If you have a CRE infection while you're in the hospital, your care team will move you to a private room.

### Staff and visitors

All staff and visitors who enter your room must wear a gown and gloves while in your room. They can get these outside of your room. They should throw them away inside your room before they leave. All staff and visitors must clean their hands after leaving your room.

You can have art or massage therapy in your room while following isolation precautions.

We'll put a sign on your door telling all staff and visitors to clean their hands before entering your room. They can wash their hands with soap and water or use an alcohol-based hand sanitizer.

## Leaving your room

You may need to leave your room for tests. If you do, you must wear a gown and gloves or be covered with a clean sheet. If you leave your room to walk around the unit, you must wear a gown and gloves. You will not be able to go to the following areas of the hospital while you still have an infection:

- Pantry on your unit.
- The Charles Hallac Patient Recreation center on M15.
- Pediatric recreation area on M9.
- The Teen Lounge (TYA Lounge) on M14.

While you're on isolation precautions, do not use other public areas, such as:

- Visitors lounges on the inpatient units.
- The hospital cafeteria.
- The main lobby.

You can walk in the halls with proper personal protective equipment (PPE). You must practice good hand hygiene, especially washing your hands with soap and water. You cannot have contact with other patients or the areas they are in while you're infected with CRE.

Your healthcare provider will tell you when it's safe to stop following these precautions. This will be after you're treated and do not have any more symptoms.

## At home

Wash your hands often with soap and water for at least 20 seconds. Do this especially after using the bathroom or having contact with blood, urine (pee), or drainage from a wound.

Wipe any surfaces that may have come in contact with the germ, such as your doorknob. Use a disinfectant, such as Clorox® or Lysol®.

## More information

If you have any questions, talk with your healthcare provider. You can also visit the **Centers for Disease Control and Prevention (CDC) website at [www.cdc.gov/hai/organisms/cre/cre-patients.html](http://www.cdc.gov/hai/organisms/cre/cre-patients.html)** to learn more.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.

Carbapenem Resistant Enterobacteriaceae (CRE) - Last updated on April 16, 2024  
All rights owned and reserved by Memorial Sloan Kettering Cancer Center