



Moving to a hospital or skilled nursing facility

What to expect when you have CRE

(Carbapenem-resistant Enterobacteriaceae)

A booklet for
patients, residents, family
members,
and caregivers



About this booklet

You are getting this booklet because you are moving between a hospital and a skilled nursing facility.

Hospitals and skilled nursing facilities care for you at different stages of your illness or injury. Because of this, they don't always do things the same way. This booklet will explain the differences between them, and what you can expect during your stay.

This booklet was developed with help from residents, family members, caregivers, and staff from hospitals and skilled nursing facilities.

What we mean by “skilled nursing facility”

Facilities with a registered nurse available in the building at least 16 out of every 24 hours, such as:

- Nursing homes
- Rehabilitation centers

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Why am I being moved to a hospital or skilled nursing facility?

To understand why you are being moved, it is helpful to know the differences between hospitals and skilled nursing facilities.

HOSPITALS



are for people who are very sick. Someone getting care at a hospital is called a “patient.” A patient usually stays at a hospital for only a short period of time. You may go to a hospital if you suddenly get very sick, if your life is in danger, or if you need special care that a skilled nursing facility can’t give you.

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are for people who can’t safely take care of themselves at home. Someone getting care at a skilled nursing facility is called a “resident.” A resident may stay at a skilled nursing facility for weeks, months, or years. Some residents consider the skilled nursing facility their home, so it may seem more casual than a hospital. You may be moved to a skilled nursing facility if you are healing from an illness or injury, if you need special care, or if you can’t safely take care of yourself at home.

What is CRE?

CRE stands for **carbapenem-resistant Enterobacteriaceae** (CAR-BUH-PEN-EM RE-ZIS-TANT EN-TER-O-BAC-TER-REE-AY-SEE-AY).

Enterobacteriaceae are a group of bacteria that normally live in our intestines and most of the time cause no problems at all.

If these bacteria get into a part of the body that doesn't have any bacteria, like the blood system, lungs, or skin they can cause a serious infection. Some names of bacteria in this group are *E. coli* (EEE-CO-LYE) and *Klebsiella* (CLEB-SEE-ELLA).

When Enterobacteriaceae are **resistant** it means they aren't killed by the antibiotics that are normally used to treat these infections. **Carbapenem** antibiotics are some of the strongest antibiotics available. When Enterobacteriaceae are resistant to carbapenems there are very few drugs that can be used to treat these infections. Sometimes these infections are untreatable.

There are two main types of CRE

- **The common type of CRE** develops resistance to carbapenem antibiotics by a change in its bacterial cell wall that keeps carbapenem antibiotics from coming into the cell and killing it. It's like having extra protection to keep out the antibiotics.
- **The rare type of CRE** is called carbapenemase-producing (CAR-BUH-PEN-EM-AZE PRO-DOO-SING) CRE, or CP-CRE. This means it can dissolve and inactivate carbapenem antibiotics. It's like having a special power that makes the antibiotics disappear. This rare type of CRE can share the power to dissolve carbapenem antibiotics with other bacteria by passing part of its DNA or genetic material. Because this sharing can happen when bacteria touch each other, CP-CRE can increase much more quickly than the common type of CRE.

Other carbapenem-resistant bacteria

There is another group of bacteria that are treated like CRE. These are called carbapenem-resistant Gram-negative bacteria. Some names of bacteria in this group include *Acinetobacter* (AH-SIN-EE-TOE-BAC-TER) and *Pseudomonas* (SOO-DOUGH-MOAN-AS). Tests can tell whether these are more like the common CRE or the rare CRE. Your healthcare staff will decide how to care for you depending on what the tests show.

There are two ways that you can have CRE

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You can have an active infection

This means that the CRE are either on your body or in your body and they are causing an infection. You can have an infection on your skin, in your blood, in your lungs, or in other parts of your body.

If you have an active CRE infection, it can easily spread to other people. Any contact with your infection, with fluid from your body (mucus, blood, urine, stool, etc.), or with something that has touched your body (like a towel) can spread CRE.

You can be a carrier

This means that the CRE are either on your body or in your body, but they are not causing an infection that is making you sick.

If you are a carrier of CRE, **you can have the bacteria on your skin and your belongings and spread CRE to other people.** If you don't wash your hands properly, you can spread CRE to things you touch with your hands. Depending on what part of your body carries CRE, it might be in the fluid that comes out of your mouth and nose when you cough or sneeze, on your skin, or in your urine or stool. Cover your mouth and nose with a tissue or your arm when you cough or sneeze and clean your hands many times each day.

How do hospitals and skilled nursing facilities prevent the spread of CRE?

Everyone who enters a hospital or skilled nursing facility must follow certain rules to prevent the spread of any bacteria.

These rules are called **standard precautions**. These rules apply to everyone—people who have CRE and people who don't have CRE.

What are standard precautions?

Standard precautions mean that . . .

Everyone must:

Wash hands—

- when entering and leaving a room.
- before and after touching patients, residents, or roommates.
- after using the bathroom.

Cover mouth and nose with a tissue or arm when sneezing or coughing, wash hands afterwards, and throw away used tissues immediately.

Doctors and staff must follow all of the above, and ALSO:

- **Wear gloves**—when touching body fluids.
- **Wear a gown**—if body fluids could get on the clothes.
- **Wear a mask and eye protection** (goggles or shield)—if body fluids could get in the eyes or on the face.
- **Wear a mask and eye protection** (goggles or shield)—if patients or residents are coughing.
- **Clean and disinfect equipment** that is shared between patients or residents. Disposable equipment may also be used.



When someone is contagious, hospitals and skilled nursing facilities will put even stricter rules in place. These rules are called **contact precautions**. Contact precautions are used along with standard precautions.

What are contact precautions?

Contact precautions mean that . . .

Doctors and staff must:

- **always wear a gown and gloves when caring for patients or residents**—these are put on before entering the room and taken off before leaving the room.
- **clean and disinfect equipment that is shared between patients or residents.** Disposable equipment may also be used.



What is the best way to wash hands?

Regular hand washing is the best way to prevent the spread of bacteria. Wash hands with soap and water, or use a hand sanitizer with at least 60 percent alcohol. **Use hand sanitizers only when hands are not visibly dirty, and otherwise wash with soap and water.**

This is the hand washing method recommended by health care providers:

- Wet your hands first under warm running water.
- Apply soap and rub hands together for at least 15 seconds, getting between the fingers and around nails.
- Rinse with warm running water.
- Dry hands with a paper towel.
- Turn the faucet off using a paper towel (remember, your hands were dirty when you turned the faucet on).
- Throw the paper towel in the trash.

How can I prevent the spread of CRE?

Wash hands

- when entering and leaving your room.
- before and after touching other patients, residents, or roommates.
- after using the bathroom.
- before and after touching your eyes, nose, mouth, genitals, pimples, boils, sores, or rashes.

Cover your mouth and nose

If you cough or sneeze, cover your mouth and nose with a tissue or your arm. Throw away used tissue immediately, and wash your hands right away.

- Don't use cloth handkerchiefs.
- Don't share towels, razors, toothbrushes, bar soap, or other personal items.

Remind doctors, staff, and family members to wash their hands before and after caring for you.

Remind family and friends to wash their hands when entering and leaving your room and before and after touching you.

- Don't touch other people's cuts, sores, or rashes unless you are wearing gloves.

If you see someone **not** following standard or contact precautions, please say something. This includes doctors, staff, visitors, family members, other patients, or residents.

How can family and friends prevent the spread of CRE?

Visits from family and friends are important for your health and healing. There are steps that your visitors can take to help protect you and themselves.

HOSPITALS



- **Regular hand washing** is the most important thing your family and friends can do. This is especially important when they enter and leave your room, and before and after they touch you.
- If you are coughing, your family and friends should wear a mask.
- **Standard precautions** must be followed by everyone at all times (see page 4). Some hospitals may post a sign on your door explaining standard precautions. Remind your family and friends to follow the instructions on this sign.
- If you are on **contact precautions**, a sign will be posted on your door about what to do. Remind your family and friends to follow the instructions on this sign.



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- Regular hand washing is the most important thing your family and friends can do. This is especially important when they enter and leave your room, and before and after they touch you.
- If you are coughing, your family and friends should wear a mask.
- If you are on contact precautions, a sign will be posted on your door asking visitors to check at the nurses' station for instructions before entering your room. Remind your family and friends to follow the instructions on this sign.

What if family and friends have questions?

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HHOSPITALS



First have families and friends talk to your doctor or the nurse caring for you.

If they want more information, they can ask to talk with the infection preventionist. There is one at every hospital.

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First have families and friends talk to the nurse caring for you.

If they want more information, they can ask to talk with the infection control nurse. There is one at every skilled nursing facility.

How am I cared for if I have an active CRE infection?

HOSPITALS



- Standard precautions and contact precautions are followed by everyone who takes care of you (see pages 4–5).
- You are only allowed to leave your room for very urgent reasons, like tests or surgery.
- Before you leave your room, you must wash your hands and put on a clean gown or robe. If you are coughing, you must wear a mask.
- Staff will also make sure your infection is contained. Any equipment that you are using, such as a walker or wheelchair, is cleaned before you leave your room.
- If you have CP-CRE, your doctor may have you bathe with special soap to decrease bacteria on your skin. This can keep the CRE bacteria from getting inside your body and can decrease spreading to other people.

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Standard precautions and contact precautions are followed by everyone who takes care of you (see pages 4–5).

Before you leave your room, you must:

- wash your hands.
- make sure your clothes are clean.
- make sure your infection is contained.
- wear a mask if you are coughing.
- any equipment that you are using, such as a walker or wheelchair, is cleaned before you leave your room.

How am I cared for if I am a CRE carrier?



HOSPITALS

- The skilled nursing facility where you were staying tells the hospital staff that you are a carrier.
- Both standard precautions and contact precautions are followed by everyone who takes care of you (see pages 4–5).
- You are only allowed to leave your room for very urgent reasons, like tests or surgery.
- If you have CP-CRE, your doctor may have you bathe with special soap. This can keep the CRE bacteria from getting inside your body and can decrease spreading to other people.



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- The hospital where you were staying tells the nursing home staff that you are a carrier. Standard precautions are followed by everyone who takes care of you (see pages 4–5).
- Contact precautions are followed for residents with CP-CRE and for those who need more care, for example, people with catheters and those with difficult to control drainage.
- You may leave your room for meals, therapy, and social activities.
- Before leaving your room, make sure your hands, clothing, and personal equipment like a wheelchair or cane is clean, and that all body fluids, like wound drainage, urine and stool are controlled.
- A staff person entering your room to put down a meal tray or hand you a medication may not put on a gown and gloves.
- Staff must wear a gown and gloves if they will have close contact with you, like helping you get out of bed or walk to the bathroom.

How is CRE treated?

CRE is usually treatable. Treatment should always be selected by your health care provider. It is important to follow any instructions for treatment that your health care provider gives you.

If you are a carrier and you DO NOT have an active CRE infection:

Your health care provider may do tests to find out if you still carry CRE. If you are a CRE carrier, your health care provider may decide to:

- do nothing, because the bacteria may go away without treatment.
- try to reduce the amount of bacteria on your skin by using a special soap.

If you have an active CRE infection:

Your health care provider may choose one or more of the following treatments:

- drain the infection.
- give you antibiotics that are strong enough to treat your infection.
- try to reduce the amount of bacteria on your skin by using a special soap.

If you see someone **not** following standard or contact precautions, please say something. This includes doctors, staff, visitors, family members, other patients, or residents.

Will I have a roommate?

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HOSPITALS

If you have an active CRE infection or if you are a carrier:

- Every effort is made to give you a private room.
- If no private rooms are available, then you may share a room with someone who has the same CRE —this is called “cohorting.”
- If cohorting isn’t possible, then you may share a room with someone who is at low risk of getting an infection.
- **People with CP-CRE require a private room.**

SKILLED NURSING FACILITIES



If you have an active CRE infection:

Every effort will be made to give you a private room.

- If no private rooms are available, then you may share a room with someone who has the same CRE —this is called “cohorting.”
- **If you have a CP-CRE infection, you must have a private room.**

If you are a CRE carrier:

An effort will be made to give you a private room.

- If no private rooms are available, then you may share a room with someone who has the same CRE—this is called “cohorting.”
- If cohorting isn’t possible, then you may share a room with someone who is at low risk of getting an infection.
- **If you are a CP-CRE carrier you must have a private room.**

Does my room need extra cleaning?



HOSPITALS

No. Your room is cleaned the same way as other rooms.

All rooms are cleaned well and on a regular schedule. Special attention is given to items that are touched a lot—like the call light, telephone, television remote control, grab bars, bed rails, and door knobs.

The mop and the cleaning solution that are used in your room are only used there. The mop and the solution in the bucket are changed before being used in the next room. This helps prevent the spread of CRE.

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How will my dishes be done?

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HOSPITALS

Your dishes are done the same way as all other dishes.

All dishes, glasses, and trays are cleaned and disinfected by using hot water and detergent and by drying at high temperatures. This process kills CRE.

You do not need to use paper plates or plastic silverware



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What happens with my laundry?

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HOSPITALS

Your laundry is done the same way as all other laundry.

There is a laundry bag or hamper in your room for all used towels, sheets, and hospital gowns. Laundry is cleaned and disinfected by using hot water and detergent and by drying at high temperatures. This process kills CRE.

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What if my family takes my laundry home to wash?

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They should follow these steps to prevent the spread of CRE. CRE is killed by using **at least one** of the following:

- Hot water (at least 130°F)
- Liquid bleach or laundry soap with dry bleach
- Hot dryer (at least 160°F)

Before washing

Wear disposable gloves to handle laundry that is soiled with body fluids—even if the fluids have dried. Hold the laundry away from your body so bacteria doesn't get on your clothes.

Put laundry that is soiled with body fluids in a plastic bag, separate from other household laundry, until it is ready to wash. This is to prevent other people from touching it and to remind you to wear gloves when you handle it.

Washing laundry

When taking laundry that is soiled with body fluids out of the bag, wear gloves and hold the laundry away from your body so bacteria doesn't get on your clothes.

It's okay to mix laundry that is soiled with body fluids and other household laundry in the washer.

CRE is killed by using heat or bleach.

Use hot water (at least 130°F) and laundry soap.

OR

Use cold water and laundry soap with dry bleach or laundry soap and liquid bleach. Liquid bleach may fade or discolor clothes. Laundry soap with dry bleach will not.

Drying laundry

Dry clothes all the way in a warm or hot (at least 160°F) dryer. If you used bleach or laundry soap with dry bleach to wash clothes, then it's okay not to dry clothes in the dryer.

Resources

Your local health department (see map at <http://www.doh.wa.gov/AboutUs/PublicHealthSystem/LocalHealthJurisdictions>)

Washington State Department of Health
www.doh.wa.gov (1-800-525-0127)

Centers for Disease Control and Prevention
www.cdc.gov

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[Tacoma-Pierce County Health Department](#)

Pierce County Antimicrobial Resistance Task Force – Infection Control & Prevention Committee

[Puget Sound Association for Professionals in Infection Control](#)

[Washington State Hospital Association](#)

For persons with disabilities this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TTY/TDD 1-800-833-6388)