

Carbapenem-Resistant Enterobacteriae (CRE)

Fact Sheet

What is CRE?

Enterobacteriaceae are a family of bacteria (germs) that are found in the normal human intestinal tract (bowel). Carbapenems are one of the most powerful types of antibiotics. Carbapenemases are enzymes (chemicals), made by some strains of these bacterium (germs), which allow them to destroy carbapenem antibiotics and is said to be resistant (no longer effective) to carbapenem antibiotics and these are referred to **Carbapenem- Resistant – Enterobacteriaceae** or **CRE**.

How can you tell if I have CRE?

If your doctor considers that you may carry (colonized) or be infected with **CRE**, they will do some simple tests. This might involve taking a swab, blood, or urine sample. The results of the tests will help your doctor manage your care.

What is the difference between infection & colonisation?

Infection means that bacteria (germs) are in or on the body and makes you sick, which results in signs and symptoms such as fever, pus from a wound, diarrhoea or pneumonia.

Colonisation means you carry the bacteria in or on your body, but you do not become sick. People who are colonised will not have signs or symptoms. Colonised patients are sometimes given treatment to prevent infection developing.

Both colonised and infected people can spread the bacteria to other patients.

Who is at risk of acquiring a CRE infection?

CRE infections are rare. People most at risk of developing a **CRE** infection are those who:

- Have been in a hospital or medical centre overseas.
- Have been very unwell and required antibiotics for a long period of time.
- Have low immunity

How is CRE spread between patients?

Both can be spread by touching the skin of an infected or colonised person (Direct Contact), or by touching a surface (Indirect Contact) that has the bacteria (germs) on it, for example hospital beds, tables, shared equipment.

How can you prevent CRE from spreading?

Regular and thorough hand washing is one of the most successful ways to help stop the spread of **CRE**. People with **CRE** should wash their hands regularly, particularly after going to the toilet. You should avoid touching any medical devices (urinary catheters tubes or intravenous drips for example), particularly at the point of where it is inserted into the body or skin. Health workers treating you should wash their hands each time they enter and leave your room. This will kill the bacteria and stop it spreading to other patients. You should not hesitate to discuss the importance of good hand cleaning with any of the staff caring for you.

Health workers may also take further steps to help stop the spread of **CRE** between patients by:

- Moving you to a single room in the hospital.
- Wearing a gown, or apron, and gloves if they are providing direct care.

Cleaning by housekeeping staff removes many bacteria that live on surfaces in your hospital room.

How is CRE infection treated?

CRE infections are generally treated with antibiotics. The antibiotic is determined by the sensitivities from the laboratory tests.

However, **CRE** is resistant to commonly prescribed antibiotics. Patients with an **CRE** infection may need to be cared for by a specialist doctor so they get the right treatment and antibiotics.

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How can I protect my family and friends from infection?

We will ask your visitors to wash their hands on entering and leaving your room with soap and water or alcohol hand rub. They may be asked to wear a gown and gloves if they are assisting with your personal care, similar the hospital staff. Visitors should avoid sitting on your bed and sit on the chairs provided.

Exposure to someone with **CRE** should not harm healthy people, including pregnant women, children, and babies.

What happens when I get home?

Whilst there is a chance that you may still be a carrier when you go home, quite often this will go away with time. But in the meantime to prevent the spread of **CRE** to others when you are at home, make sure you wash yours hand with soap and water and dry them thoroughly, for example after going to the toilet, before preparing and eating food and after touching animals. Use your own towels and face clothes. Do not share these with other people. Avoid sharing grooming items such as nail scissors, tweezers, razors, and toothbrushes. Cover any skin wounds possible. Make sure you follow the instructions and advice provided by your doctor or healthcare provider in how to care for wounds and manage medical devices.

No special cleaning is required in your home. All your clothes, towels, eating utensils and dishes can be washed the way you normally do.

It is important that you always tell your doctor, nurse, paramedic, or other health care provider that you have previously had CRE. This will help to prevent the future spread of CRE.

Where can I get further information?

Talk to your doctor or the nurses caring for you. If you wish to speak with the Infection Control department, ask your nurse to contact us. Our

office hours are 8am to 4pm Monday to Friday. Our contact numbers are:

- Office: (02) 9480 9433
- Office: (02) 9480 9732

References

NSW Dept of Health; Infection Prevention and Control Policy PD2017_013

National Health and Medical Research Council; Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019)

Centers for Disease Control and Prevention (CDC); Patients: Information about CRE (November 13, 2019)

Australian Commission on Safety and Quality in Health Care; Information for Patients and their Visitors - Carbapenem Resistant Enterobacteriaceae (CRE) (November 2013)