

Carbapenem Resistant Organisms (CRO) Patient Information Sheet

What are CRO?

Carbapenem Resistant Organisms (CRO) are a family of bacteria called Enterobacteriaceae which are normally found in our intestine or bowel.

Carbapenem Resistant Organisms (CRO) are sometimes referred to Carbapenem Resistant Enterobacteriaceae (CRE). CRO produce enzymes that break down carbapenem antibiotics making them ineffective, resulting in limited treatment options.

Who is at risk of CRO infection?

In general healthy people do not usually get CRO infections. Acutely ill patients who require devices like ventilators, catheters (bladder/vein) or those on long courses of antibiotics are at risk of CRO infection. CRO is found mostly in hospitals overseas.

What does it mean to be colonised with a CRO?

Of those people who have a CRO on or in their body, most experience no symptoms or illness and are said to be colonised. CRO infection means the bacteria is causing symptoms/illness.

How is CRO spread?

CRO are usually spread person to person through contact with infected or colonised people; mostly via contaminated hands or indirectly from contaminated surfaces or medical equipment. CRO can be found in urine, faeces or wounds and the patient's hands/skin and even environment can be contaminated with the bacteria.

Can CRO be treated?

Because CRO are resistant to most antibiotics, treating CRO infections are extremely difficult and in some cases impossible. This is why it is very important to prevent the spread of CRO in the first place.

Why hand hygiene is important

Our hands can transfer the bacteria to others – generally cleaning your hands (hand hygiene) is an effective way to stop the spread of CRO.

To prevent the spread of CRO while in hospital

Early identification through screening (testing) and Transmission Based Precautions can prevent spread in hospital. Ask staff if you would like to know more information.

In addition to the usual hygiene practices, such as staff regularly cleaning their hands, CRO spread can be prevented by:

- Placing you in a single room/ensuite
- Placing a sign on your door to alert staff to take special precautions. For further information please read our fact sheet – 'Why am I in Isolation?'
- Staff wearing gowns and gloves when they care for you

- Placing an alert on your file – this is to alert staff to take extra precautions
- Asking visitors to wear gowns and gloves

You can help prevent the spread of CRO while in hospital by:

- Never sharing towels, face cloths, eating utensils, personal items e.g. toothbrushes
- Always cleaning your hands before eating and after using the toilet
- Asking visitors to clean their hands before and after visiting you
- Not allowing your visitors to use your bathroom or sit/lie on your bed
- Expecting all healthcare workers to clean their hands before and after contact with you
- Asking questions of your healthcare team so you can understand about CRO

If you are required to leave your room for treatment under the direction of your nurse clean your hands before leaving your room. Wounds or invasive device must be securely covered to ensure there is no leakage of any body fluids. Ask staff if you would like more information

You can help prevent the spread of CRO when at home by:

- Cleaning your hands before preparing/eating food, after using the toilet, touching any wound or medical device, touching your eyes or mouth, blowing your nose, sneezing or coughing
- Covering skin wounds
- As far as usual household cleaning goes no additional measures are required
- Taking antibiotics only as prescribed
- Informing doctors or healthcare providers that you have CRO and follow their instructions
- Unless instructed otherwise by your doctor, do all your normal activities paying particular attention to hand hygiene

Where can I get more information?

This fact sheet is a quick guide only. If you have further questions please ask your doctor or nurse for assistance. They will be able to help you search the information you require.

You can also visit the following website for more information:

Centers for Disease Control & Prevention www.cdc.gov/hai/organisms/cre/cre-patients.html

Acknowledgements

Australian Commission on Safety and Quality in Health Care (2013). *Recommendations for the control on Multi-drug resistant Gram-negatives: carbapenem resistant Enterobacteriaceae*. Retrieved from <http://www.safetyandquality.gov.au/wp-content/uploads/2013/12/MRGN-Guide-Enterobacteriaceae-PDF-1.89MB.pdf>

Centers for Disease Control and Prevention (2015). *Carbapenem-resistant Enterobacteriaceae (CRE) infection: Patient Frequently asked questions*. Retrieved from <http://www.cdc.gov/hai/organisms/cre/cre-clinicianFAQ.html>

Government of Western Australia Department of Health (2012). *Patient & caregiver education sheet carbapenem-resistant Enterobacteriaceae (CRE)*. Retrieved from <http://www.health.wa.gov.au/circularsnew/attachments/712.pdf>

Memorial Sloan Kettering Cancer Center (2013) *Carbapenem-resistant Enterobacteriaceae (CRE) fact sheet*. Retrieved from: <http://www.mskcc.org/cancer-care/patient-education/resources/carbapenem-resistant-enterobacteriaceae-cre>

Public health Ontario (2013). *Carbapenemase-producing Enterobacteriaceae (CPE): Information sheet for patients and visitors*. Retrieved from http://www.publichealthontario.ca/en/eRepository/RPAP_Annex_A_CPE_Information_Sheet_2013.pdf