

## How long does it take for CRE results to come back from the laboratory?

The laboratory will usually be able to rule out CRE within three days. However, if CRE is suspected, the sample will be sent to a specialist laboratory for more detailed testing. These results may take one or two weeks and you will be given your results as soon as they are ready. You will stay in an isolation room until the final results are received. If you don't have CRE, you may be moved out of the room, unless there is another reason for staying in isolation. If CRE is picked up in the sample, you will stay in the isolation room for the duration of your hospital stay, to prevent spreading CRE to other patients.

## What if I am discharged home before the results come back?

You can go home as soon as your doctor says you are ready. You will not have to stay in hospital to wait for your result and your doctor will let you know the result when it is available. There is no need to take special precautions at home. People in the community are usually fit and healthy, so they are less likely than hospital patients to pick up CRE. It is always very important to wash your hands carefully after using the toilet and before preparing meals or eating.

Notes:

# CRE

Carbapenem  
Resistant  
Enterobacteriaceae

## What is CRE?

CRE stands for **Carbapenem Resistant Enterobacteriaceae**. CRE are bugs (bacteria) that live in the bowel and that cannot be treated by certain antibiotics, known as carbapenem antibiotics. In most people, CRE bugs are harmless and do not cause infection. However, if a patient is prone to infection and the infection is caused by CRE, it can be difficult to treat because many of the commonly used antibiotics will not work against CRE.

## Can CRE be harmful?

For most patients, CRE lives harmlessly in the bowel and does not cause infection (this is called 'colonisation'). This is because the person's immune system keeps CRE in check in the bowel and prevents it from spreading elsewhere in the body. Sometimes however, CRE can cause infection in patients, for example when they need intensive care or while receiving chemotherapy. CRE can cause infections, such as kidney infections, wound infections or in severe cases, blood infection. Antibiotics are needed to treat CRE infection. Doctors need to know as soon as possible if a patient is carrying CRE so that the most effective antibiotics can be chosen to treat the infection.

## How do people get CRE?

- Patients who have already taken lots of antibiotics are more at risk of picking up CRE. The reason for this is that the more bugs are exposed to antibiotics, the more likely they will develop 'resistance' to that antibiotic so that antibiotic no longer works.

- CRE is more common in certain countries than others – if you have been a patient in a hospital abroad in the past year, you need to let your doctor know, especially if you are being admitted to an Irish hospital so that they can test for CRE.
- CRE is carried by patients, healthcare staff or visitors, either harmlessly or if they are infected with it. It can spread between patients through direct contact with each other or by touching items or surfaces that the person with CRE may have touched such as bed rails, toilets or equipment. As patients in hospital are much more vulnerable to infection than patients in their own homes, special precautions are required to prevent the spread of CRE between patients in hospital.

## What are the special precautions for patients with CRE?

The precautions are designed to prevent CRE spreading between patients on the ward. Anybody found to have CRE is placed in an isolation room with their own toilet or commode. Staff or visitors must wear gloves and aprons before entering the isolation room and before coming into contact with the patient to protect their hands and clothes from CRE. Patients, staff and visitors must pay special attention to hand hygiene. All staff must clean their hands before and after any contact with every patient, regardless of whether the patient has CRE or not.

## How do you know if a patient is carrying CRE?

A swab from a patient's back passage is the quickest and easiest way to check for CRE, as it is usually detected in the bowel. Your nurse will take

the swab and send it to the laboratory to be checked for CRE.

## Why do we need to know if a patient is carrying CRE?

It is very useful to know if a patient is carrying CRE before it makes them sick. If it is known beforehand that the patient is carrying CRE then the most effective antibiotics can be chosen early to treat any signs of an infection. When staff know that a patient is carrying CRE, special precautions can be put in place immediately, to stop the CRE spreading to other patients, some of whom might be particularly prone to developing infection if they came into contact with CRE.

## Who should be tested for CRE?

- CRE is a very common bug in some countries. If you have been admitted to hospital in another country in the past 12 months, you should tell your doctor or nurse so that a CRE test can be done.
- Some Irish hospitals have also picked up CRE in patients. If you have been admitted to an Irish hospital in the past 12 months, you should tell your doctor or nurse. They will then be able to decide if you need to be tested for CRE. Your nurse or doctor will know which Irish hospitals have reported CRE cases.
- Some hospitals may want to perform a CRE test on patients who might be prone to developing infections, for example those needing intensive care treatment.