

Carbapenemase Producing Gram Negative Organisms (CPGNOs)

Patient Information Leaflet

What are Carbapenemase Producing Gram Negative Organisms?

Carbapenemase Producing Gram Negative Organisms (CPGNO) are a group of bacteria which can live in our gut, causing us no harm, and in some cases helping us to digest our food, this is called colonisation. However, if the bacteria get into the wrong place, such as the bladder or the bloodstream, they can cause an infection.

These bacteria have developed a resistance to a powerful group of antibiotics called carbapenems. Carbapenems are an important group of antibiotics that doctors often rely on to fight infections where treatment with other antibiotics has failed.

CPGNOs are also known as Carbapenem resistant Enterobacteriaceae (CRE), Carbapenemase producing Enterobacteriaceae (CPE), Carbapenemase Resistant Organisms (CRO).

Why does Carbapenem resistance matter?

Antibiotic resistance makes it harder to treat infections, both now and in the future.

Carbapenem antibiotics can only be given in hospital directly into the bloodstream. Until now, doctors have relied on them to successfully treat certain difficult infections when other antibiotics have failed to do so. This could mean longer hospital stays, limited medication that can be used to treat an infection and isolation may be required whilst you are in hospital.

In a hospital, where there are many vulnerable patients, the spread of resistant bacteria can cause problems.

How are they spread?

CPGNOs are spread through direct contact with a person who is colonised or infected with a CPGNO or indirectly through contact with the persons immediate environment.

They are not spread through the air or by coughing or sneezing.

How will I know if I have a CPGNO?

If you have been in a hospital abroad or in other areas of the UK or if you have been exposed to someone who has a CPGNO we will ask your permission to screen you.

How do we screen for a CPGNO?

If a sample is required for testing, a member of your care team will discuss how to proceed, we will always maintain your privacy and dignity. With your permission a member of staff will insert a swab (like a long cotton bud) into your rectum (bottom). This swab will be briefly inserted about 3 to 4 cm to collect a sample.

We may also test samples of your faeces (stool/poo) and take swabs or samples from other relevant sites such as any wounds, catheters or line sites.

The swab will then be sent to the laboratory to see if anything grows. Your care team will be able to tell you the results normally in about three days.

What happens if I am positive for a CPGNO?

CPGNOs do not normally cause problems and does not usually need to be treated, unless you have an infection. You can “carry” a CPGNO within your gut without it making you unwell, this is known as carriage or colonisation.

If you require antibiotic treatment to treat an infection, this may be more complicated, and choices of antibiotics can be more limited if you have a CPGNO.

It is likely that you will be cared for in a single room with your own toilet (where possible). Healthcare staff will wear personal protective equipment (PPE) such as gloves and gowns/aprons when providing care for you and will wash their hands when they leave the room.

We will ask your visitors to wash their hands on entering and leaving your room and if they are supporting you with your personal care, such as helping you go to the toilet, we will ask them to wear PPE.

What does it mean to be a contact?

Being a contact means that you have been in the same care environment as someone who has been identified as having CPGNO. Being a contact does not mean that you have this or that you have an infection, but it does mean that it may have spread to you.

If you are considered a contact, you may be offered screening to identify if this has spread to you. This screening will be completed as part of an eight-week programme, if you remain in hospital. If all screens remain negative in these eight weeks, you will no longer be considered a CPGNO contact.

If you are discharged home, there is no requirement for ongoing screening in the community.

How do we prevent the spread of this within healthcare?

We can reduce the spread of CPGNOs by ensuring we wash our hands regularly, especially after contact with body fluids and before eating/drinking. Healthcare staff should wash their hands before they provide care for you and should clean their hands between tasks.

Ensuring the environment and equipment are clean are important to reduce the risk of spread.

How do we prevent the spread of the infection when I go home?

Any infection would have been treated before you leave the hospital, however you may still be a carrier when you go home. There is no clear answer as to how long you will be a carrier for.

At home no additional precautions are needed, regular hand washing and normal household cleaning practices are sufficient. Towels, clothing, bedsheets and other items can be washed in your normal washing machine, no special washing temperature is required. All eating utensils and dishes can be washed as normal.

If you, or a member of your household is admitted into hospital, it is important that you/they tell staff that you are known to be a carrier of CPGNO.

If your home is a care home or if you have carers coming into your home, the staff providing care for you will need to continue the precautions that have been in place whilst you were in hospital, including cleaning and wearing PPE.

How will this impact my care?

If you are in hospital, it is likely that you will be cared for in a single room. Staff who are supporting you with your care will be wearing gowns and gloves and there will be additional cleaning of the high touch points in your room.

Antibiotic treatment for any infections may be more complicated, and your doctors may require additional support from other doctors to ensure the best treatment for you.

Where can I get more information?

If you are in hospital, you can discuss this with your care team or ask to speak with the hospital infection prevention and control team.

If you are at home, you can discuss this with your GP or healthcare provider.

Further information can be found online at:

- [Actions to contain carbapenemase-producing Enterobacterales \(CPE\) - GOV.UK](#)