

CPE QUESTIONS AND ANSWERS

What is CPE and how common is it?

Various kinds of bacteria useful to humans (for example, *E. coli* and strains of *Klebsiella* or *Proteus mirabilis*) can be found in a healthy person's intestinal tract and mucous membranes, or in moist areas such as skin folds.

Bacteria that have developed resistance against even the broadest-spectrum antibiotics are called CPE (Carbapenemase-Producing Enterobacteriaceae).

CPE have become widespread in the hospitals of some countries, and they have also been found outside of hospitals, for example in India. They have entered Finland over the past few years with patients who have been transferred from hospitals abroad directly to Finnish hospitals.

What is meant by "CPE carrier" and "CPE infection"?

A person is said to be a CPE carrier if the bacteria have grown in a specimen from his or her body. CPE bacteria are usually found in the gut, in mucous membranes, or in urine, and cause no symptoms at all.

CPE infection means that the bacteria are causing symptoms of infection. Most CPE carriers never develop an infection caused by CPE.

How are CPE carriers recognized?

CPE are most often found when specimens for identifying antibiotic-resistant bacteria are collected from patients who have been hospitalized outside Finland. They may also be identified when a bacterial culture is done from a wound, urine or other body fluids due to an infection.

What kinds of infections are caused by CPE?

Most CPE carriers have no symptoms at all and never develop an infection caused by CPE. CPE may cause urinary tract infections, wound infections, and occasionally a severe systemic (blood) infection.

How are CPE transmitted?

CPE may spread in a hospital from one patient to another through people's hands or by touching surfaces. They do not spread through the air. Healthy people have a low risk of acquiring CPE.

Why and how are efforts being made to prevent CPE from spreading in the hospital?

Preventing CPE from spreading in hospitals is important because the spread of CPE would make it more difficult to treat infections in seriously ill patients. Therefore, it is important for both patients and staff to perform good hand hygiene. You will receive hand hygiene instructions from staff.

In the hospital, CPE carriers are treated in their own room throughout the hospitalization period. They leave the room only when escorted by staff. Hands are always disinfected when leaving the room. The staff wears protective gloves and disposable protective coats or aprons when caring for a CPE carrier. Protective clothing need not be worn if the room is visited only briefly (e.g. to bring in a food tray, medicines, etc.).

Visits are normally permitted under the supervision of ward staff. Visitors receive instructions for performing good hand hygiene. If the visitors participate in care, they use protective gear as well.

I was found to have CPE. What now?

Being a CPE carrier does not have any kind of impact on normal living (e.g. home, workplace, hobbies, interpersonal relationships). Just as usual, you should thoroughly wash your hands, using soap, after visiting the restroom and before handling food. If you have any wounds, follow the wound care instructions provided by your ward. You should wash your hands before and after wound care. Use regular store-bought cleaning agents for cleaning.

CPE detected in you does not increase your family members' risk of getting an infection.

How long does being a CPE carrier last, and do I need to tell others about it?

It is not known precisely how long CPE persist in a person's body, but they probably disappear within a few months in most people. If over a year has passed since the CPE were found and you have not been hospitalized or required antibiotics, the cancellation of your CPE carrier status may be considered if sampling no longer reveals the bacteria. This will be decided on a case-by-case basis by an infection control nurse and an infection control doctor.

In the event of hospitalization, it is important to inform a doctor if you or your family member is a CPE carrier. It is not necessary to inform anyone about your CPE carrier status in the workplace, at school, at a daycare center, in recreational settings, or anywhere beyond the healthcare sector.

Do you have other questions?

Contact the ward where you were treated, the hospital infection control staff of the hospital.