

Carbapenem-Resistant *Pseudomonas aeruginosa*

Information for health care settings

Pseudomonas is a type of bacteria commonly found in the environment. One species of this bacteria, *Pseudomonas aeruginosa*, can cause infections in humans. Some *Pseudomonas aeruginosa* bacteria are resistant to carbapenem antibiotics, which are often reserved for serious infections. These are called **carbapenem-resistant *Pseudomonas aeruginosa* (CRPA) bacteria**.

How is CRPA spread?

CRPA can be spread through direct contact with patients or residents who are colonized or infected with CRPA or by the hands or clothing of health care personnel (HCP). CRPA can also be spread through contaminated surfaces in the patient's or resident's environment.

A person who is **colonized** with CRPA carries the organism in or on their body, but it is not causing symptoms. People who are colonized can spread the organism to surfaces in their environment and to other people.

Who is at risk for CRPA?

Healthy people do not usually get CRPA infections. People who are at higher risk for CRPA infections include those:

- Who frequently receive health care.
- With open wounds.
- Who require medical devices such as ventilators or urinary catheters.
- With weakened immune systems or chronic health conditions.

How are CRPA infections treated?

Commonly prescribed antibiotics are not effective against CRPA infections so treatment decisions should be made on a case-by-case basis by a health care provider. People who are colonized that do not show active signs of infection do not generally require treatment.

Why is CRPA infection prevention important?

CRPA infections can spread rapidly in health care settings and be very difficult to treat, leading to increased mortality and high health care costs. CRPA bacteria can also pass their resistance to carbapenem antibiotics to other bacteria, which can lead to widespread antibiotic resistance.



What can HCP do to prevent the spread of CRPA?

Practice consistent hand hygiene with alcohol-based hand sanitizer (ABHS) or soap and water.

HCP should perform hand hygiene **before and after** changing dressings, providing patient or resident care (such as bathing, dressing, or changing linen), and accessing indwelling devices. Patients and residents should also be encouraged to perform hand hygiene often.

Increase the frequency of environmental cleaning and disinfection, especially for frequently touched surfaces.

Thoroughly clean and disinfect all patient and resident care equipment after use. Whenever possible, use single-use, disposable, non-critical equipment or dedicate equipment to one patient or resident.

Follow appropriate precautions and ensure personal protective equipment (PPE) is used properly.

For non-nursing home settings:

Contact precautions should be the standard of care for patients or residents colonized or infected with a multidrug-resistant organism (MDRO), like CRPA. HCP should wear gown and gloves when interacting with the patient or resident or their environment. Further considerations for implementing contact precautions can be found in the DHS *Guidelines for Prevention and Control of MDROs in Health Care Settings* (www.dhs.wisconsin.gov/publications/p4/p42513.pdf).

For nursing homes only:

Enhanced barrier precautions (EBPs) should be implemented, when contact precautions don't otherwise apply, for residents who are colonized or infected with an MDRO or those with wounds or indwelling medical devices, regardless of MDRO status. HCP should wear gown and gloves during high-contact resident care activities. Further consideration for implementing EBPs can be found in DHS *Recommendations for Prevention and Control of Targeted MDROs in Wisconsin Nursing Homes* (www.dhs.wisconsin.gov/publications/p03250.pdf).

Communicate MDRO status when patients or residents are receiving ancillary services or being transferred to another health care facility.

When a person who is colonized or infected with an MDRO is transferred to another health care facility, leaves the facility for an outpatient clinic visit, or receives other ancillary services, the receiving facility must be informed of the person's MDRO status so that proper precautions can be taken in those settings.

For more information, visit the Wisconsin HAI Prevention Program CRPA webpage (www.dhs.wisconsin.gov/disease/carbapenem-resistant-pseudomonas-aeruginosa.htm).

