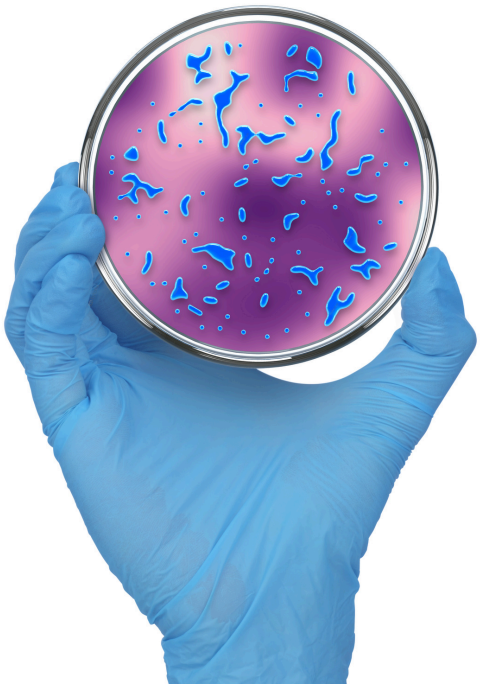
Infection Control Micro-Learns User Guide

ABOUT THE MICRO-LEARNS

The Project Firstline Infection Control Micro-Learns are a series of guided infection control discussions that provide brief, on-the-job educational opportunities. Each micro-learn focuses on a single infection control topic and connects infection control concepts to immediate, practical value. Health care workers (HCWs) can easily apply the key points to their daily work and perform the recommended actions to keep germs from spreading.



USING THE MICRO-LEARNS

The micro-learns can be incorporated into existing opportunities where groups of health care workers gather, such as pre-shift “huddles” or team meetings. The sessions should be led or facilitated by an experienced team member with infection control expertise.

Each micro-learn package includes:

- **An adaptable discussion guide for the facilitator:** The discussion guide is not a script. Facilitators are encouraged to adapt the guide for their audience by including relevant and practical questions and ideas.
- **A job aid for the facilitator:** The visual job aid helps to reinforce the key messages of the micro-learn. Facilitators are encouraged to make the job aid available after the micro-learn session, such as in digital or hard copy form.

Notes for Facilitators

- Before presenting a micro-learn, check the policies and protocols at your facility and adapt the content accordingly.
- Build on your knowledge, experience, and awareness to connect the content to local context or relevant recent events so your audience can apply the concepts confidently.
- The micro-learns reinforce infection control concepts when risks are observed in patients or in the patient environment, not necessarily in visitors or other staff members.

Carbapenem-Resistant *Pseudomonas aeruginosa* (CRPA) Micro-Learn Discussion Guide

Use the talking points below and accompanying job aid to engage your team in short, focused discussion. Adapt to meet your needs.

INTRODUCE THE TOPIC

Share information about the topic that your audience should know:

- *Pseudomonas* infections are caused by strains of bacteria found widely in wet environments. The most common type causing infections in humans is called *Pseudomonas aeruginosa*.
- It is considered a multidrug-resistant organism (MDRO).
- **Resistant -** means the germs are not killed by medication and the infection continues to spread within a person.
- CRPA usually spread from person to person, often via the hands or clothing of HCWs or on contaminated shared medical equipment.
- CRPA can cause pneumonia, bloodstream infections, urinary tract infections, surgical site infections, and are particularly dangerous for patients with chronic lung diseases.
- CRPA primarily colonizes the respiratory tract and gastrointestinal tract.
- **Colonization** - patients can carry CRPA on and in their body and do not show signs or symptoms of illness or infection.

EXPAND THE TOPIC

Share additional information about what your audience should know on the job:

- CRPA thrive in the presence of water. Contaminated environmental sources, such as sink drains and toilets, have been increasingly recognized as reservoirs contributing to CRPA transmission.
- <5% of CRPA are carbapenemase producing (CP).
- To prevent CRPA transmission in healthcare settings remember to:
  - Follow proper hand hygiene protocols
  - Adhere to proper transmission-based precautions
  - Thoroughly clean and disinfect patient rooms and equipment
  - Communicate prevention methods to staff, patients and visitors
  - When transferring a patient colonized or infected with CRPA, notify accepting facilities and units of the patient's CRPA history

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DISCUSS WITH YOUR TEAM

Find out how your audience feels about the topic:

- Are you familiar with the transmission-based precautions required for a patient with CRPA colonization or infection?
- Do you know what specific cleaning product in your facility is effective against CRPA?
- Can you list a few ways CRPA can spread in your facility?
- Do you understand why CRPA is a threat in healthcare facilities?
- What ways can you prevent the spread of CRPA?

WRAP UP AND REINFORCE

Reinforce key takeaways:

- CRPA that cause outbreaks in healthcare settings, tend to be more difficult to treat, and are associated with poorer patient outcomes.
- If you are caring for a patient with CRPA, make sure to properly clean your hands after contact with patient and the patient environment.
- Thoroughly clean and disinfect any shared or reusable equipment with an EPA-registered disinfectant that kills CRPA using the correct contact time.
- Ensure that an appropriate sign is present on the patient's door to alert healthcare personnel and visitors of recommended precautions for CRPA.
- Treatment generally includes antibiotics. Unfortunately, treatment options are limited.

Carbapenem-Resistant *Pseudomonas aeruginosa* (CRPA) Micro-Learn Discussion Guide

Carbapenems are a class of antibiotics that were developed to treat bacteria that are resistant to other drugs. Due to the overuse of these antibiotics, some types of *Pseudomonas* have developed resistance to carbapenems, and these bacteria are called carbapenem-resistant pseudomonas aeruginosa (CRPA).

How Does it Spread?

Directly and indirectly through contaminated surfaces, objects, and/or medical equipment in healthcare facilities:

- Doorknobs, bedrails
- Blood pressure cuffs
- Glucometers
- Nursing carts / crash carts
- Missed hand hygiene moments
- Inappropriate use or not wearing PPE when indicated

Patient Risk Factors

Hospital patients and long-term care facility residents that are at risk:

- Receive complex medical care
- Have invasive devices (i.e. urinary cathethers or breathing tubes)
- Have severe, chronic wounds or open wounds from surgery.
- Have weakened immune systems or chronic health conditions.

Colonization

CRPA primarily colonizes the upper and lower respiratory tract. It also colonizes on the skin, in wounds, and in the digestive tract. Colonization screening for CP-CRPA can be performed via rectal or tracheal swab.

People who are colonized can spread CRPA onto to surfaces and objects around them and to other patients.

NJHealth New Jersey Department of Health

Infection Control Practices for Reducing CRPA in Healthcare Settings

Healthcare workers should always practice proper hand hygiene

Patient care environment should be properly cleaned using EPA-registered one-step hospital-grade disinfectants

Use transmission-based precautions for suspected and confirmed infections

Clean all mobile and reusable equipment after patient use

Ensure timely identification of patients infected or colonized with CRPA

Family members and patients should be encouraged to perform hand hygiene often

Patients should be cohorted according to facility policy and procedure

Provide ongoing education and observation-based audits

Practice good sink hygiene and limit patient exposures