

Carbapenem-Resistant and Carbapenemase-Producing Organisms Infection Prevention in Long-Term Care Facilities

To stop the spread of carbapenem-resistant organisms (CROs) and carbapenemase-producing organisms (CPOs) in your facility, VDH recommends employing the following infection prevention strategies.

1. Hand Hygiene

- Promote, monitor, and provide feedback on hand hygiene.
- Ensure supplies necessary for adherence to hand hygiene are accessible in resident care areas.

2. Transmission-Based Precautions

Contact Precautions (Table 1)

- Residents infected or colonized with a CRO or CPO who have acute diarrhea, draining wounds, or other sites of secretions or excretions that are unable to be covered or contained should be placed on Contact Precautions.
- Implement Contact Precautions if there is ongoing CRO or CPO transmission in the facility.
- Discontinue Contact Precautions & apply Enhanced Barrier Precautions if the resident no longer meets criteria above.
- Empiric Contact Precautions might be used for residents transferred from high-risk settings (facilities in areas where CPOs are common or from facilities known to have residents with CPO colonization or infection).

Enhanced Barrier Precautions (Table 2)

- Enhanced Barrier Precautions should be used during high-contact resident care activities (dressing, bathing/showering, transferring, providing hygiene, changing linens, changing briefs or assisting with toileting, device care or use, or wound care).
- Gown and gloves would not be required for non-high-contact care activities, unless otherwise necessary for adherence to standard precautions.
- CDC does not recommend discontinuing Enhanced Barrier Precautions during the resident's admission.

For All Residents

- Monitor and provide feedback on proper adherence to Contact Precautions or Enhanced Barrier Precautions.
- Ensure adequate supplies are available to implement Contact Precautions or Enhanced Barrier Precautions.

3. Healthcare Personnel (HCP) and Visitor Education

- HCP and visitors should be educated about preventing transmission of CROs/CPOs.
- At a minimum, education and training should include the proper use of transmission-based precautions, including donning and doffing personal protective equipment (PPE) and hand hygiene.
- Post clear signage on the resident's door describing the type of precautions in place.

4. Timely Notification

- Report any suspected or confirmed CPO colonization or infection to the local health department.

5. Minimize Use of Invasive Devices

- Devices (e.g., urinary catheters, central lines) should be discontinued promptly when no longer needed.

6. Communication of CRO/CPO Status at Discharge and Transfer

- If a resident with CRO or CPO infection or colonization is transferred to another facility, ensure that their diagnosis is shared with the accepting facility in a timely manner.

7. Promotion of Antimicrobial Stewardship

- Ensure that antimicrobials are used for appropriate durations and that the appropriate, narrowest spectrum antimicrobial is used.
- CDC has identified core elements for successful long-term care antimicrobial stewardship programs.

8. Environmental Cleaning

- Perform daily cleaning and disinfection that include high touch surfaces such as bed rails, meal trays and other areas in close proximity to the resident.
- Clean and disinfect areas around sinks regularly and do not store medical supplies/equipment near sinks.

9. Resident Cohorting

- Residents infected or colonized with a CRO or CPO who are on Contact Precautions should be placed in a single-patient room whenever possible.
- Residents on Enhanced Barrier Precautions do not require a private room.

10. Screening Contacts of Residents with CPO

- Screen residents with epidemiologic links to residents with newly-identified CPO colonization or infection.
- Contact your local health department for information about colonization screening for CPOs.

11. Active Surveillance Testing

- Screen high-risk residents at admission.
- Contact your local health department for information about colonization screening for CPOs.

Resources

- [CDC Facility Guidance for Control of CRE](#)
- [CDC Implementation of PPE in Nursing Homes to Prevent Spread of MDROs](#)
- [CDC Management of MDROs in Healthcare Settings](#)
- [CDC Public Health Response to Contain Novel or Targeted MDROs](#)

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Intensity of infection prevention measures is based on resident's clinical status, presence of CRO/CPO transmission in the facility, and factors that increase risk of transmission to other residents in the facility. General guidance is listed below.

Table 1. Infection Prevention Measures for Residents with CRO/CPO Infection or Colonization Who Require Contact Precautions

These recommendations are applicable to residents with CRO/CPO infection or colonization who:

- Have acute diarrhea, draining wounds or other sites of secretions or excretions that are unable to be covered or contained **OR**
- Reside on units or in facilities where ongoing CRO/CPO transmission is documented or suspected **OR**
- Have another condition or infection where Contact Precautions is recommended (e.g., *C. difficile*).

Healthcare Personnel Recommendations	
Standard Precautions	Yes
Contact Precautions	Yes; gown and gloves upon room entry
Perform hand hygiene often, and always after leaving resident's room	Yes
Private room	Yes
Restricted to room	Yes, except for medically necessary care
Door signage	Yes
Designated or disposable equipment	Yes*
Visitor Recommendations	
Perform hand hygiene often, and always after leaving resident's room	Yes
Contact Precautions	Yes; gown and gloves upon room entry

*If not feasible to dedicate equipment, clean and disinfect per manufacturer's instructions before use on another resident.

Residents may transition to the recommendations in Table 2 when they no longer meet the criteria for Contact Precautions.

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Table 2. Infection Prevention Measures for Residents with CRO/CPO Infection or Colonization Who Require Enhanced Barrier Precautions

These recommendations are applicable to residents with CRO/CPO infection or colonization who **do not meet criteria for Contact Precautions**:

Healthcare Personnel Recommendations	
Standard Precautions	Yes
Enhanced Barrier Precautions	Yes; gown and gloves for high-contact resident care activities*
Perform hand hygiene often, and always after leaving resident's room	Yes
Private room	No
Restricted to room	No
Door signage	Yes
Designated or disposable equipment	Not required; clean and disinfect per manufacturer's recommendations before use on another resident
Visitor Recommendations	
Perform hand hygiene often, and always after leaving resident's room	Yes
Enhanced Barrier Precautions	Yes; gown and gloves for high-contact resident care activities*

*Examples of **high-contact resident care activities** include: dressing, bathing/showering, transferring, providing hygiene, changing linens, changing briefs or assisting with toileting, caring for or using indwelling medical devices (e.g., central line, urinary catheter, feeding tube, tracheostomy/ventilator), and providing wound care.