

OIG Newsletter Article

In the July 2019 OIG newsletter, we discussed multidrug-resistant organisms (MDRO) as they relate to long-term care (LTC) facilities. In addition, we also reviewed colonization versus infection and the possible implications for an LTC facility. This article will focus on Contact Precautions and Enhanced Barrier Precautions (EBP) recently introduced by the Centers for Disease Control and Prevention (CDC). Historically, Contact Precautions are burdensome in LTC facilities as the use of personal protective equipment (PPE) and room restriction to prevent transmission of MDROs can negatively impact residents' quality of life. Enhanced Barrier Precautions have been developed by CDC to assist with decisions regarding PPE use and room restriction, with the goal of improving residents' quality of life while also providing protection for other residents and staff. You can find the CDC document on Enhanced Barrier Precautions, "Implementation of Personal Protective Equipment in Nursing Homes to Prevent Spread of Novel or Targeted Multidrug-resistant Organisms (MDRO) " released on July 26, 2019, at <https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html>.

Case Study 1.

Mr. Jefferies is transferring back from the hospital with a leg wound that tested positive for a carbapenem-resistant *Escherichia coli*. Drainage from the wound is controlled by dressing. Mr. Jefferies has finished a 10-day course of antibiotics and is getting dressing changes two times per day.

Question 1.

What type of PPE would be required for high-contact situations such as dressing, bathing/showering, providing hygiene, changing linens, or wound care?

Answer 1.

The EBP document ([CDC, 2019](#)) suggests that you would implement Enhanced Barrier Precautions with this resident of the LTC facility. In this case study, the required PPE would be gloves and gown prior to the high-contact care activity.

High contact care activities are defined as:

- Dressing
- Bathing/showering
- Transferring
- Providing hygiene
- Changing linens
- Changing briefs or assisting with toileting
- Device care or use: central line, urinary catheter, feeding tube, tracheostomy/ventilator
- Wound care: any skin opening requiring a dressing

Always change PPE before caring for another resident. Face protection may also be necessary if performing activity with risk of splash or spray.

Question 2.

Would the resident be restricted to his room?

Answer 2.

Since this is not an active infection and the wound drainage is controlled by the dressing, this resident would not be restricted to his room.

Case Study 2.

Mr. Thomas is a bedridden LTC facility resident. Mr. Thomas has just returned from a seven-day stay at the local hospital for a urinary tract infection (UTI). A wound culture from a pressure ulcer on the right heel was collected on the first day of admission to the hospital. The culture tested positive for carbapenem-resistant *Enterobacter cloacae*, which is shown to produce *Klebsiella pneumoniae* carbapenemase (KPC). Copious drainage is noted from the right heel and it cannot be contained in a dressing.

Question 1.

What type of transmission-based precautions would be appropriate for this LTC facility resident?

Answer 1.

Since Mr. Thomas has an active infection for which he is still receiving antibiotics, and he has drainage from the heel wound that cannot be contained, Contact Precautions would be required. PPE (gloves and gown) must be donned prior to any room entry, doffed before room exit, and changed before caring for another resident. Face protection may also be needed if performing activity with risk of splash or spray.

Question 2.

Does Mr. Thomas have to be restricted to his room?

Answer 2.

Yes, except for medically necessary care (e.g., hemodialysis). If Mr. Thomas receives physical therapy, it is recommended that it be provided in his room with therapy staff wearing gown and gloves.

Question 3.

When can Contact Precautions be discontinued?

Answer 3.

Contact Precautions applies to all residents infected or colonized with a novel or targeted MDRO *in any of the following situations*:

- Presence of acute diarrhea, draining wounds, or other sites of secretions or excretions that are unable to be covered or contained
- On units or in facilities where ongoing transmission is documented or suspected

Precautions can be discontinued when drainage from the heel wound can be contained.

The Kentucky Department for Public Health Hospital Acquired Infection/Antibiotic Resistance (HAI/AR) program receives many of these types of questions regarding Contact and Enhanced Barrier Precautions. If you would like additional information or have additional questions regarding MDROs, PPE, or Transmission-based Precautions, please contact the HAI/AR program.

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References

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<https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html>

<https://www.cdc.gov/longtermcare/prevention/index.html>

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