IMPLEMENTING THE USE OF

# Enhanced Barrier Precautions

IN SKILLED LONG-TERM CARE NURSING FACILITIES

AAPACN
AMERICAN ASSOCIATION OF
POST-ACUTE CARE NURSING

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The American Association of Post-Acute Care Nursing (AAPACN®) represents more than 20,000 post-acute care nurses and professionals working in more than 7,200 facilities. Dedicated to supporting post-acute care nurses and healthcare professionals in providing quality care, AAPACN offers members best in-class education, certification, resources, and strong collaborative communities.

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## Enhanced Barrier Precautions

**What are Enhanced Barrier Precautions?**
Enhanced Barrier Precautions (EBP) are an effective infection control intervention used to reduce the transmission of multidrug-resistant organisms (MDROs) in skilled long-term care nursing facilities. EBP involves the use of personal protective equipment (PPE), specifically gowns and gloves, during high-contact resident care activities (i.e., prolonged direct contact) that has been demonstrated to result in the transfer of MDROs to the hands and clothing of nursing home staff.

**Which type of Long-Term Care Facilities should use Enhanced Barrier Precautions?**
According to the Centers for Medicare and Medicaid Services, nursing homes, specifically skilled long-term care nursing facilities, must implement EBP. Of note, select state regulations may use the term intermediate nursing facilities.

**When should Enhanced Barrier Precautions be used for a resident?**
EBP should be used for residents with any of the following:

- Colonization or infection with targeted MDROs
- Chronic wounds (e.g., pressure ulcers, diabetic foot ulcers) or indwelling devices (e.g., central venous catheter, indwelling urinary catheter, tracheostomy, feeding tube) that increase their risk of acquiring MDROs

**Does the use of Enhanced Barrier Precautions restrict the movement of a resident in their facility?**
Residents may come out of their rooms and participate in group dining or activity rooms along with other residents if the residents on EBP can maintain:

- Clean hands
- Clean clothes
- Clean equipment
- Contained drainage
- Covered wounds

Residents infected or colonized with a MDRO should remain on contact precautions in the following situations:

- Presence of acute diarrhea, draining wounds or other sites of secretions or excretions that are unable to be covered or contained
- During a suspected or confirmed MDRO outbreak investigation
- For a limited time period on units or in facilities during the investigation of a suspected or confirmed MDRO outbreak
- In consultation or directed by public health authorities

**When should Enhanced Barrier Precautions be used when ambulating a resident in their room or hallway?**
While the use of a gown and gloves is generally discouraged in hallways and other common areas, there may be individual circumstances (e.g., physical therapy that has to occur outside of the resident's room) that prompt an evaluation for the need to use PPE outside of the room, depending on the degree of assist/close contact.

**Recommendations following Enhanced Barrier Precautions for nursing home staff based on care activities:**
Staff need to make decisions at the point of care based on what activity/task they are performing:

**TABLE 1:** Recommendations following Enhanced Barrier Precautions for nursing home staff based on care activities

| Examples of Care Activities | Infection Control Recommendation |
|---|---|
| Talking to resident | Use HAND HYGIENE (minimal contact with resident) |
| Passing oral medications | |
| Passing trays | |
| Dropping off mail | |
| Removing or putting on clean wheelchair foot pedals | |
| Assisting with clothing protector or helping put on outerwear (e.g., a jacket or sweater) | |
| Transferring resident from wheelchair to chairs in the dining room or during an activity (common areas) | |
| Helping with life enrichment activities (e.g., card games, arts and crafts, singing, discussions) | |
| Assisting with meals or meal set up | |
| Providing care **under** clothes or dressings | Use HAND HYGIENE, GOWN, GLOVES (high-contact activities) |
| Providing bundled AM or PM care including oral care, dressing, bathing, grooming | |
| Taking the resident to the toilet or providing peri care | |
| Having prolonged high-contact with items in the resident's room, resident equipment, or with resident clothing or skin in the resident's room, shower room, or the therapy gym, or doing extended therapy/restorative activities | |
| Emptying drainage bags | |
| Doing dressing changes | |
| Changing the linens | |
| Providing bed mobility, including rolling from side to side | |

***Note:*** Standard Precautions apply to the care of all residents based on the anticipated exposure to blood, body fluids, secretions or excretions.

# Educating on the Use of Enhanced Barrier Precautions in Skilled Long-Term Care Nursing Facilities

**Case Study 1**
You are a certified nurse assistant in a skilled nursing facility who was assigned to assist a resident on Enhanced Barrier Precautions due to an indwelling urinary catheter. This resident requires a one-person assist for bathing, dressing, and changing their bed linen.

1. Which one of the following is NOT a high-contact care activity?
    a. Bathing
    b. Dressing
    c. Changing bed linen
    d. All are high-contact care activities

2. What is required for these care activities?
    a. Hand hygiene, gloves, and gown
    b. Hand hygiene (use standard precautions)

3. The resident on Enhanced Barrier Precautions calls you for assistance using the call light and asks if they can have their magazines handed to them. What is required for this care activity?
    a. Hand hygiene, gloves, and gown
    b. Hand hygiene (use standard precautions)

4. After handing the magazines to the resident, they ask to go to the bathroom. What is required for this care activity?
    a. Hand hygiene, gloves, and gown
    b. Hand hygiene (use standard precautions)

**Case Study 2**
You are a nurse who is caring for a resident who had an indwelling urinary catheter placed in the emergency department after a fall. The resident has no history of a multidrug-resistant infection or colonization and does not have chronic wounds.

5. Does this resident require Enhanced Barrier Precautions?
    a. Yes
    b. No

6. The interdisciplinary care team determines there is no indication for an indwelling urinary catheter for this resident. The resident's physician places an order to discontinue the indwelling urinary catheter and the device is removed from the resident. Does this resident require Enhanced Barrier Precautions?
    a. Yes
    b. No

**Case Study 3**
You are a nurse on the admissions team and a resident is pending admission. The resident has an indwelling urinary catheter and a history of multidrug-resistant infections in their urine with Carbapenemase-producing carbapenem-resistant Enterobacterales (CP-CRE). The resident has wounds, and the drainage cannot be contained. The resident has been admitted to a private room.

7. Does the resident require Contact Precautions or Enhanced Barrier Precautions?
    a. Contact Precautions
    b. Enhanced Barrier Precautions

8. Can this resident leave their private room to move around the facility?
    a. Yes
    b. No

9. If this resident receives a wound vacuum device which will contain the drainage, does the resident require Contact Precautions or Enhanced Barrier Precautions?
    a. Contract Precautions
    b. Enhanced Barrier Precautions

## Answer Key

1. D: All are high-contact care activities
2. A: Hand hygiene, gloves, and gown
3. B: Hand hygiene (use standard precautions)
4. A: Hand hygiene, gloves, and gown
5. A: Yes
6. B: No
7. A: Contact precautions
8. B: No
9. B: Enhanced Barrier Precautions

## Rationale for Answers

1. Bathing, dressing, and changing bed linen (bundled care) involve prolonged physical contact with the resident and their environment, which increases the risk of MDRO transmission.
2. Enhanced Barrier Precautions requires the consistent use of hand hygiene, gloves, and gown during high-contact care activities to reduce the risk of transmission of MDROs to healthcare personnel.
3. Handing magazines involves minimal contact, so the risk of contaminating hands or clothing is low. Therefore, the risk of transmission to other residents is minimal, and only hand hygiene is needed. A gloves or gown are not required.
4. Assisting with toileting involves direct contact and potential exposure to body fluids, increasing the risk of transmission. Enhanced Barrier Precautions, including hand hygiene, gloves, and gown, are required to minimize this risk.
5. Residents with indwelling devices (e.g., urinary catheters, central venous catheters, etc.) are at higher risk of multidrug-resistant organism colonization or infection. As such, Enhanced Barrier Precautions should be used during high-contact care activities to prevent the transmission of multidrug-resistant organisms in these residents.
6. Once the indwelling urinary catheter is discontinued and removed from the resident, the risk of transmission through high-contact care activities is reduced. Since the resident has no history of colonization or infection with a targeted multidrug-resistant organism, Enhanced Barrier Precautions are no longer necessary.
7. Contact Precautions are needed due to the resident having both wounds with uncontained drainage and a history of multidrug-resistant infections in their urine. This combination of factors is the reason why Contract Precautions are needed instead of Enhanced Barrier Precautions.
8. Residents on Contact Precautions are generally restricted to their rooms to prevent the spread of infectious organisms, except when leaving for medically necessary care (e.g., procedure). Participation in group or communal activities should be avoided to minimize the risk of transmission to others.
9. Since the wound drainage is now contained by the wound vacuum device, the resident needs Enhanced Barrier Precaution. If the wound drainage was not contained by the wound vacuum device, the resident should remain on Contact Precautions.

**References:**

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2. Centers for Disease Control and Prevention (CDC). Frequently Asked Questions (FAQs) about Enhanced Barrier Precautions in Nursing Homes. June 8, 2021. Accessed September 2, 2024. https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/faqs.html

3. Healthcare Infection Control Practices Advisory Committee (HICPAC). Considerations for the use of Enhanced Barrier Precautions in Skilled Nursing Facilities. June, 2021. Accessed September 2, 2024. https://www.cdc.gov/hicpac/media/pdfs/EnhancedBarrierPrecautions-508.pdf

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## Questions and Answers on Enhanced Barrier Precautions

The following questions and answers are associated with an APIC and AAPACN collaborative live webinar on implementing enhanced barrier precautions in long-term care settings, which is available On-Demand.

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| Does a resident with a history of *Clostridioides difficile* (*C. diff*) or norovirus require Enhanced Barrier Precautions? | NO, but they do require Contact Precautions when identified to have an infection with *C. diff* or norovirus until gastrointestinal symptoms have resolved (e.g., nausea, vomiting, diarrhea). Refer to Appendix A from the Centers for Disease Control and Prevention (CDC) for guidance on isolation precautions for various infections. |
| How long should you maintain Enhanced Barrier Precautions if a resident is infected or colonized with a novel (e.g., newly emerging in a locality or region) targeted MDRO of concern (e.g., *Candida auris*, Carbapenemase-producing organisms) but has NO open chronic wounds or indwelling devices? | The use of Enhanced Barrier Precautions is required for the duration of the resident's stay at a facility due to being infected or having a colonization with a targeted or novel MDRO. More information can be found here. |
| If a resident is colonized with a targeted or novel MDRO, are they considered colonized indefinitely? | YES, residents colonized with a novel or targeted MDRO are intended to remain on Enhanced Barrier Precautions for the duration of their stay in a facility. Because MDRO colonization is typically prolonged and follow-up testing may yield false negatives, the CDC does not recommend routine retesting of residents with a history of colonization or infection with an MDRO or discontinuation of Enhanced Barrier Precautions after a subsequent negative test. |
| After an acute infection with an MDRO, can you test for colonization to discontinue Enhanced Barrier Precautions? | NO, repeat cultures or "test of cure" are not recommended. The CDC does not recommend screening cultures for residents with a history of colonization or infection with an MDRO to assess for decolonization and to inform discontinuation of vertical infection control measures. Residents can be colonized intermittently or for prolonged periods; therefore, negative results should not be used to discontinue appropriate infection control measures (i.e., Enhanced Barrier Precautions) due to the concern for false negatives (i.e., the test result is incorrect and the MDRO is still present). Such test results for colonized residents could lead to potential transmission of MDROs within a facility and cause significant implications for infection control efforts. More information can be found here. |

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| Does every resident with any type of MDRO need to stay in Enhanced Barrier Precautions indefinitely? | NO, there are examples of targeted MDROs of concern as defined by the CDC found on the Enhanced Barrier Precautions FAQ webpage. Facilities can use their Facility Assessment and Infection Prevention Risk Assessment to determine if an endemic MDRO (e.g., ESBL-producing organisms) may be managed with Standard Precautions. Centers for Medicare and Medicaid Services (CMS) states that Enhanced Barrier Precautions guidance also provides facilities and jurisdictions with the flexibility to implement Enhanced Barrier Precautions for residents colonized or infected with additional MDROs that may be epidemiologically important locally. Determinations about an organism being epidemiologically important may be influenced by factors that include local epidemiology (i.e., local prevalence, transmission patterns, and risk factors within a specific setting), presence of ongoing or past outbreaks, propensity for transmission in healthcare facilities, association with severe outcomes, or targeting for local prevention efforts. More information can be found here. |
| A resident had an indwelling urinary catheter and was on Enhanced Barrier Precautions, but the catheter has now been removed. The resident has NO history of a targeted or novel MDRO. Can you discontinue Enhanced Barrier Precautions and transition to Standard Precautions for this resident? | YES, you can place this resident on Standard Precautions if the indwelling urinary catheter has been removed and the resident has no history of colonization or infection with a targeted or novel MDRO of concern. Standard Precautions are the basic level of infection control practices used for all patient care (e.g., hand hygiene, personal protective equipment). It is recommended to review your facility's policies and procedures to identify how to transition a resident from Enhanced Barrier Precautions to Standard Precautions. |
| How should you perform screening cultures for MDROs? | There are different supplies (e.g., swabs) based on the type of organism for the screening culture. For guidance, it is recommended to contact your local or state health department prior to performing these screening cultures for MDROs. There are reference documents available to learn more about screening for MDROs and *Candida auris* by the CDC. |
| When are screening cultures warranted? Should you be screening each resident for MDROs? | There may be select circumstances when it is recommended to perform screening cultures for the presence of certain MDROs, especially if it is related to a local or regional public health response to address antimicrobial resistance; however, pre-emptive screening cultures are not recommended to determine a resident's MDRO status to implement Enhanced Barrier Precautions. Refer to the CDC's Enhanced Barrier Precaution FAQ here to learn more about screening residents for MDRO carriage. |
| Does passing oral medication, checking blood sugars, or adjusting an intravenous flow rate for a resident require the use of gowns and gloves? | If only minimal contact is expected, as in the examples mentioned, then Standard Precautions would apply (e.g., hand hygiene, gloves) for those activities. If you need to reposition the resident or perform another high-contact activity or if these activities are part of bundled care being provided, the use of gowns and gloves is recommended. |

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| Is the use of washable gowns permitted for residents on Enhanced Barrier Precautions compared to disposable gowns? | There are commercially available washable gowns that can be used as PPE for resident care. If your facility is considering the use of washable gowns, it is recommended to review the manufacturer's instructions for use (IFU) of the washable gowns to determine the number of times the item can be laundered and develop a tracking system to remain in compliance with the manufacturer. Washable gowns should be placed in a facility's soiled linen hamper after completing care on one resident. |
| Does caring for a feeding tube require the use of Enhanced Barrier Precautions (i.e., putting on a gown and gloves for the activity)? | It may be acceptable to use only hand hygiene and gloves for specific activities related to an indwelling medical device like a feeding tube (e.g., passing medication through a feeding tube). The use of hand hygiene and gloves is appropriate if the activity is not bundled together with another high-contact care activity. |
| Does a resident with a device, such as a central venous catheter (CVC), require Enhanced Barrier Precautions? | The requirement of Enhanced Barrier Precautions depends on what type of CVC is present. Devices that are fully embedded in the body, such as healed ports, non-accessed tunneled catheters, and dialysis fistulas, would NOT require the use of Enhanced Barrier Precautions. CVCs such as hemodialysis catheters or peripherally-inserted central catheters (PICCs) would require the use of Enhanced Barrier Precautions. If the CVC has a component that communicates internally and externally to the body (e.g., line or drain), Enhanced Barrier Precautions are recommended. |
| Where can you store personal protective equipment (PPE)? | You should store PPE in such a way that it prevents contamination. While storing PPE outside the resident's room is ideal, CMS states that PPE can be stored outside or near the resident's door for their room. The focus should be on healthcare personnel having available PPE at the point of care. If over-the-door storage holders are used for PPE, please review all applicable codes, such as the fire code. |
| If a MDRO is determined to be epidemiologically important, can you use Enhanced Barrier Precautions for a resident with a Methicillin-resistant *Staphylococcus aureus* (MRSA) colonization or infection? | While MRSA is not a targeted organism of concern as defined by the CDC, it may be important to consider it for the use of Enhanced Barrier Precautions within your facility. CMS states that Enhanced Barrier Precautions guidance also provides facilities and jurisdictions with the flexibility to implement Enhanced Barrier Precautions for residents colonized or infected with additional MDROs that may be epidemiologically important locally. Determinations about an organism being epidemiologically important may be influenced by factors that include local epidemiology (i.e., local prevalence, transmission patterns, and risk factors within a specific setting), presence of ongoing or past outbreaks, propensity for transmission in healthcare facilities, association with severe outcomes, or targeting for local prevention efforts. More information can be found here. |
| Does Canada have similar recommendations for using Enhanced Barrier Precautions? | Recommendations may vary in different regions in Canada. For further guidance, it is recommended to contact your regional health department for support. |

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| There is a long-term care facility that has a sheltered care component with an individual who has a targeted MDRO of concern (e.g., Carbapenem-resistant *Enterobacteriaceae*). Should Enhanced Barrier Precautions be implemented for this individual? | Enhanced Barrier Precautions are not recommended for sheltered care or assisted living facilities. Enhanced Barrier Precautions are only recommended in skilled long-term care nursing facilities. For further guidance, it is recommended to contact your local or state health department for support. |
| What precautions are recommended for residents in the therapy gym? | Depending on the activity, it may be considered a high-contact activity. Therapists should use gowns and gloves when working with residents on Enhanced Barrier Precautions in the therapy gym. Therapists should also use a gown and gloves when in the resident's room if they anticipate prolonged, close body contact where transmission of MDROs to the therapist's clothes is possible. |
| Does a resident require Enhanced Barrier Precautions if they have a surgical site that is healing well and open to air? | NO, a healing, non-infected, post-operative surgical wound would not be an indication for EBP. Shorter-lasting wounds, such as skin breaks or skin tears covered with a band-aid or similar dressing would also not be in indication for EBP. |
| What is considered a "chronic" wound? | The longer a wound is present, the more concern we have for those wounds becoming colonized with an MDRO. Chronic wounds are often poorly healing wounds or areas of the skin in residents with underlying medical conditions, resulting in pressure areas, diabetic ulcers, and venous or arterial stasis wounds. |
| Does a resident with a colostomy or ileostomy require Enhanced Barrier Precautions? | NO, unless the resident is colonized or infected with a targeted or novel MDRO. Ostomies, such as colostomies or ileostomies, are not defined as wounds or indwelling devices, and therefore do not require Enhanced Barrier Precautions. |

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