

Enhanced Barrier Precautions for Nursing Homes

Andrea Chapman, MPH, CIC
Carolyn Kiefer, RN, MSN, CIC, FAPIC
Virginia Department of Health
March 27, 2024

Objectives

1

Define
Enhanced
Barrier
Precautions

2

Describe when
and how to
implement
Enhanced
Barrier
Precautions

3

Discuss the
differences
between
Enhanced
Barrier and
Contact
Precautions

4

Describe
communication
process when
transferring a
resident on
Enhanced
Barrier
Precautions

5

Practice
applying and
assessing
Enhanced
Barrier
Precautions

WHAT Are Enhanced Barrier Precautions?

Helps prevent transmission of multidrug-resistant organisms (MDROs) when Contact Precautions do not apply

Falls between Standard and Contact Precautions

Requires use of gown and gloves during high-contact care activities for high-risk residents to disrupt MDRO spread

Expands the use of personal protective equipment (PPE) beyond situations in which exposure to blood and body fluids is anticipated

WHEN Do Enhanced Barrier Precautions Apply?

- Use for all residents with any of the following when Contact Precautions *do not apply*:
 - **Infection or colonization with a MDRO and:**
 - Does not have a draining wound, diarrhea, or secretions/excretions that cannot be contained OR
 - MDRO transmission is NOT suspected on the unit or in the facility
 - **No infection or colonization with a MDRO, but has:**
 - Wound(s) and/or indwelling medical device(s) (e.g., central line, urinary catheter, feeding tube, tracheostomy, endotracheal tube)

WHEN Do Contact Precautions Apply?

- Use for all residents infected or colonized with an MDRO in *any of the following situations*:
 - Have 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
 - When recommended by public health authorities
- Other infections/conditions as outlined in [CDC's Guideline for Isolation Precautions Appendix A](#) (e.g., *C. difficile*, scabies)

Wounds: Which Type of Precautions to Use?

Standard Precautions

- Shorter-lasting wounds, such as skin breaks or skin tears, that can be covered with a Band-Aid or similar dressing

Enhanced Barrier Precautions (Nursing Homes Only)

- Per CDC: “Any skin opening requiring a dressing”
- Generally chronic wounds
- Examples include pressure ulcers, unhealed surgical wounds, diabetic foot ulcers, chronic venous stasis ulcers

Contact Precautions

- Wounds that cannot be covered or contained due to size and/or amount of drainage

Comparing Enhanced Barrier Precautions to Contact Precautions

Enhanced Barrier Precautions

- MDRO infection or colonization **WITHOUT** acute diarrhea or draining wounds or other sites of secretion/excretion that cannot be covered or contained
- On unit or in facility where ongoing MDRO transmission is **NOT** documented or suspected
- Wound that requires a dressing, regardless of MDRO status
- Indwelling medical device (e.g., central line, urinary catheter), regardless of MDRO status

Contact Precautions

- MDRO infection or colonization with acute diarrhea, draining wound(s) that cannot be contained, or other sites of secretion/excretion that cannot be covered or contained
- On unit or in facility where ongoing MDRO transmission is documented or suspected
- Other condition or infection where Contact Precautions is recommended (e.g., *C. difficile*, norovirus)

Enhanced Barrier Precautions

VS

Contact Precautions

**Applies Only to Nursing
Homes**

**Resident NOT
Isolated to Room**



During High-Contact Resident Care Activities



Hand Hygiene



**Environmental
Cleaning**



**Standard
Precautions**



**Applies to All
Healthcare Settings**

**Resident
Isolated to Room**



Upon Room Entry Every Time



Hand Hygiene



**Environmental
Cleaning**



**Standard
Precautions**



What type of MDROs are eligible for Enhanced Barrier Precautions?

Pan-resistant organisms

Carbapenemase-producing Enterobacterales

Carbapenemase-producing *Pseudomonas* spp.

Carbapenemase-producing *Acinetobacter baumannii*

Candida auris

Methicillin-resistant *Staphylococcus aureus*

Vancomycin-resistant *Enterococcus*

ESBL-producing *Enterobacterales*

Multidrug-resistant *Pseudomonas aeruginosa*

Drug-resistant *Streptococcus pneumoniae*

MDROs
targeted by
CDC

Additional
epidemiologically
important
MDROs

If transferring a resident to another facility:

- **SHARE**
 - MDRO status and specific information about the MDRO(s), other infectious conditions (if present)
 - Presence of wounds and/or indwelling medical devices
 - Type of precautions, if any
 - Rooming needs, such as a private room
 - Pending or outstanding cultures

If receiving a resident from another facility:

- **ASK**
 - About MDRO status and other infectious conditions
 - If unfamiliar with MDRO, ask questions
 - About presence of wounds and/or indwelling medical devices
 - If resident is on precautions of any kind
 - Rooming needs, such as a private room
 - Pending or outstanding cultures

Communication

EBP in Practice: Scenario 1, Q1

You are currently working at XYZ Nursing and Rehab Facility. You received the admission report from a local hospital for a new resident coming to your facility. Mr. Alex Jones, a 79-year-old male is not on any precautions at the hospital, has no history of MDROs, but does have a right great toe non-healing ulcer that cultured positive for *Pseudomonas aeruginosa* during his hospital stay.

- His wound isn't draining and is covered with a dressing.
- The facility is not experiencing MDRO transmission.

What type of precautions would Mr. Jones require?

EBP in Practice: Scenario 1, Q1 Answer

What type of precautions would Mr. Jones require?

Enhanced Barrier Precautions

Due to the open toe wound with a dressing that can contain the wound, he meets the wound indication for EBP.

Enhanced Barrier Precautions At a Glance



No private room required

Residents are not restricted to their room

Hand hygiene upon entering and exiting room

Gowns and gloves are worn for high-contact resident care activities

Intended to be used for the entire length of resident's stay in the facility (or until wounds heal / device removed)

EBP Personal Protective Equipment (PPE)



Wear gloves and gown
prior to the high-contact
care activity



Change PPE before
caring for another
resident



Use eye/face protection if
performing activity with
risk of splash or spray
(part of Standard
Precautions)

What Are High-Contact Resident Care Activities?

Dressing

Bathing/
showering

Transferring

Providing
hygiene

Changing linens

Changing briefs
or assisting with
toileting

Device care or
use

Wound care

EBP in Practice: Scenario 1, Q2

Physical therapist John will be evaluating and directly assisting Mr. Jones while he performs a series of exercises to develop a physical therapy treatment plan.

Does John need to wear PPE when completing his evaluation?

EBP in Practice: Scenario 1, Q2 Answer

Does John need to wear PPE for his evaluation?

Yes, due to the direct resident contact that will occur during the evaluation process, this would be considered a high-contact resident care activity.

EBP in Practice: Scenario 1, Q3

What type of PPE is required for EBP?

EBP in Practice: Scenario 1, Q3 Answer

What type of PPE is required for EBP?

Gown and gloves.

Add other PPE according to Standard Precautions.

For example, use a mask if Mr. Jones was coughing and eye/face protection if splashes or sprays are likely.



EBP in Practice: Scenario 1, Q4

Mr. Jones requests to attend bingo in the activity room with other residents.

Due to the need for EBP, can Mr. Jones attend bingo?

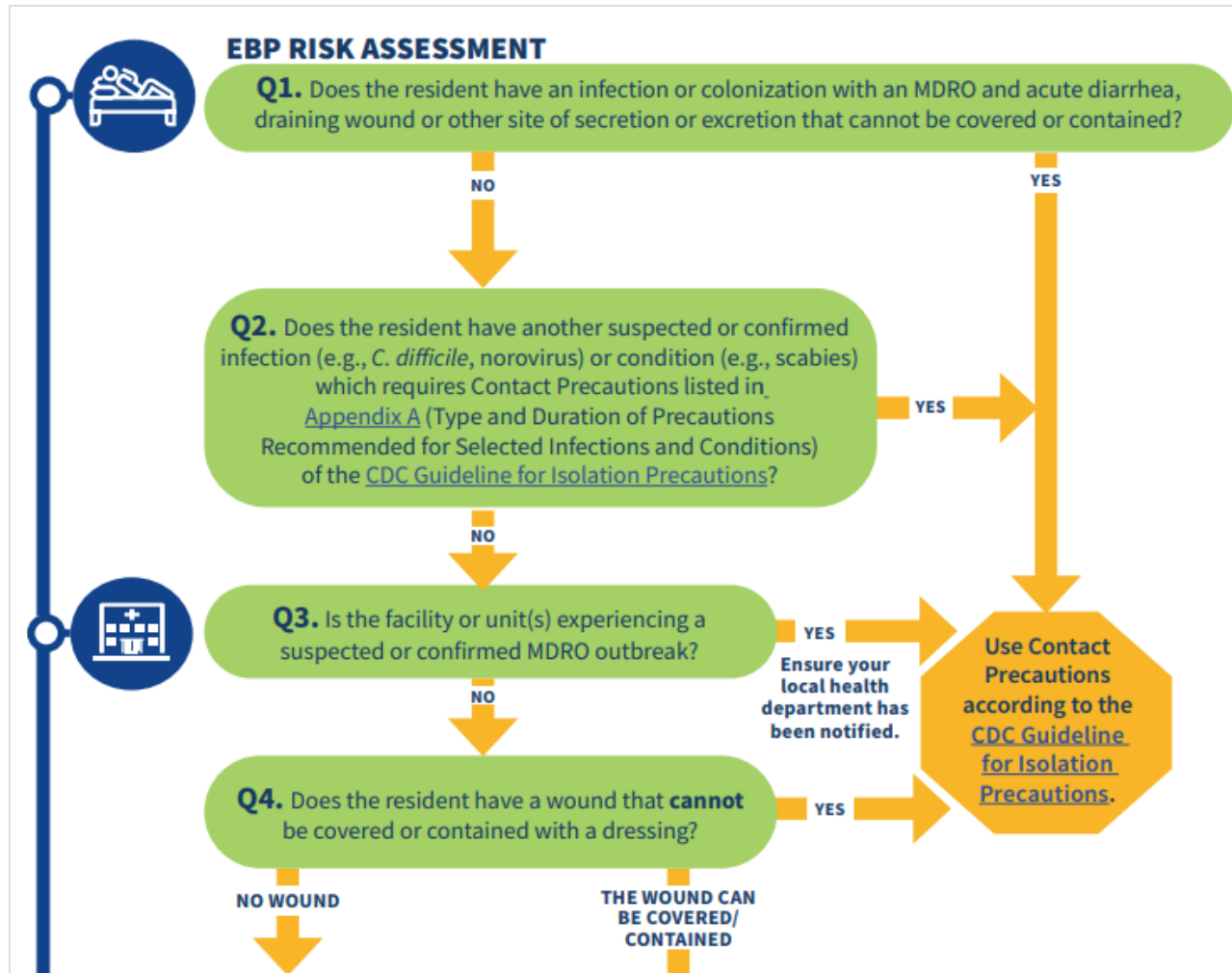


EBP in Practice: Scenario 1, Q4 Answer

Due to the need for EBP, can Mr. Jones attend bingo?

Yes, EBP does not require the resident to be restricted to their room or limited from participation in group activities.

Implementing Enhanced Barrier Precautions: VDH Resources




VDH EBP Algorithm

Implementing Enhanced Barrier Precautions: VDH Resources

Infection Prevention Quick Guide: Enhanced Barrier Precautions

Enhanced Barrier Precautions (EBP) are an infection control intervention designed to reduce transmission of drug-resistant organisms. EBP uses targeted gown and glove use during high-contact resident care activities. These precautions are applicable for nursing home settings only.

Point your phone's camera at the QR code to read the CMS memo (3/20/24) about EBP in nursing homes.



Infection Prevention Checklist

- When to use EBP:**
 - One or more of the following situations apply:
 - Resident has a multidrug-resistant organism (MDRO) infection or colonization (*when Contact Precautions do not otherwise apply*)
 - Resident has a wound that requires a dressing *regardless of MDRO status*
 - Resident has an indwelling device (e.g., urinary catheter, central line, feeding tube) *regardless of MDRO status*
 - EBP has been recommended by public health authorities
 - AND
 - Resident is **not** on a unit or in a facility where ongoing MDRO transmission is documented or suspected
- Resident placement:** No private room is required. Residents on EBP are not restricted to their room.
- Door signage:** Place a sign outside the resident's door indicating the type of precautions and personal protective equipment to be used. Example of an EBP sign from CDC: <https://www.cdc.gov/hai/pdfs/containment/enhanced-barrier-precautions-sign-P.pdf>
- Personal protective equipment (PPE):** Wear a gown and gloves during high-contact resident care activities.
 - High-contact resident care activities include: dressing, bathing/showering, transferring, changing linens, providing hygiene, changing briefs or assisting with toileting, device care or use, and wound care
- Focus on hand hygiene**

Visit the VDH HAI/AR Website: <https://www.vdh.virginia.gov/haiar/>
Contact Us: hai@vdh.virginia.gov

Updated: March 2024

[Quick guide for nursing home infection preventionists](#)

ENHANCED BARRIER PRECAUTIONS (EBP)

WHY EBP IS IMPORTANT
Keep residents, staff, and visitors safe by adding a layer of protection during resident care activities that have a higher risk of spreading dangerous germs.

WHEN TO USE EBP

- Resident has **ever tested positive for a multidrug-resistant organism (MDRO)**. Do not use EBP and use **Contact Precautions** if:
 - The resident has a draining wound, diarrhea, or secretions/excretions that cannot be contained
 - OR
 - Ongoing MDRO transmission is documented or suspected on the unit or in the facility
- Resident **does not have a history of an MDRO** but has one or both of the following:
 - A wound that requires a dressing. Wound drainage is contained in the dressing.
 - An indwelling device (central line, urinary catheter, feeding tube, trach, or ventilator)
- Recommended by public health authorities**

HOW TO APPLY EBP

- Place residents appropriately**
 - No private room required
 - Residents are not restricted to their room
- Place EBP sign on resident's door**
- Perform hand hygiene** upon entering and exiting room
- Wear gown and gloves** during high-contact resident care activities
High-contact resident care activities include: Dressing, bathing/showering, transferring, changing linens, providing hygiene, changing briefs or assisting with toileting, device care or use, wound care
- Use EBP** for the entire length of resident's stay in the facility (or until wounds heal / device removed)

Last Updated 12/2023

[Education fair poster](#)

Enhanced Barrier Precautions: How to Share the News

Communication to resident and those authorized to receive health information:

- During care activities that have a higher risk of spreading dangerous germs, we will be wearing a gown and gloves.
- This is to help keep you, staff, and visitors safe.
- We will also be cleaning our hands often and encourage you to do the same.

To healthcare personnel:

- You must wear a gown and gloves when performing high-contact resident care activities like dressing, bathing, or assisting with toileting.
- These activities have the highest risk for spreading drug-resistant germs, so it's important that PPE is worn during these times.
- Please also make sure to have an Enhanced Barrier Precautions sign posted on the resident's room door.
- Thanks for being consistent with these infection prevention measures!

Implementing Enhanced Barrier Precautions: Education for Residents and Visitors

- Providing education to residents and visitors
 - [Resident and Loved Ones Poster- How We Keep Our Residents Safe](#)
 - Also available in Spanish
 - [Enhanced Barrier Precautions Letter to Nursing Home Residents, Families, Friends, and Volunteers](#)

Enhanced Barrier Precautions How We Keep Our Residents Safe

What's New


We are using Enhanced Barrier Precautions to help protect our residents from infection. You may notice:


- New signs throughout the facility
- Staff wearing gowns and gloves for high-contact care activities

Why We're Making These Changes

We are taking action to protect our residents from dangerous germs. These germs can cause infections that are hard to treat.

Enhanced Barrier Precautions allow us to provide safe, high quality care and help stop the spread of germs within our facility.






More than
50%
of nursing home residents carry a
multidrug-resistant organism.

How to Help When You Visit

You can help stop the spread of germs by cleaning your hands with alcohol-based hand sanitizer or soap and water.

Learn more about Enhanced Barrier Precautions:
bit.ly/PPE-NursingHomes



Implementing Enhanced Barrier Precautions: Auditing Healthcare Personnel (HCP)

- Incorporate periodic monitoring and assessment of adherence to EBP
 - Criteria for use of EBP
 - Practices of HCP during high-contact resident care activities and PPE use
 - Room for signage, availability of trash receptable, hand hygiene, and PPE supplies



[Observation Tool](#) and [Observation Tool Summary Spreadsheet](#)

Discontinuing Enhanced Barrier Precautions

- The need for EBP should be assessed throughout resident's stay

When should Contact Precautions be used in place of EBP?

- ✓ If a resident with an MDRO develops diarrhea, or a wound can't be contained, or the unit/facility is experiencing an MDRO outbreak
- ✓ If a new infection (e.g., norovirus, *C. difficile*) or condition (e.g., scabies) arises that requires Contact Precautions

When can EBP can be discontinued?

- ✓ If the initial reason for EBP has resolved and no other indications for EBP exist:
 - Wound has healed
 - Indwelling medical device removed

EBP in Practice: Scenario 1, Q5

Two months after admission to the facility, Mr. Jones's wound has healed with no open areas noted.

- He is not colonized or infected with an MDRO
- He does not have any indwelling medical devices

Can Mr. Jones be removed from EBP?

EBP in Practice: Scenario 1, Q5 Answer

Can Mr. Jones be removed from EBP since his wound has healed?

Yes. He does not have any other conditions that would support the use of EBP, like a history of MDROs or current MDRO infection or invasive devices.

When evaluating the discontinuation of EBP, it should also be assessed whether there are any other conditions that may warrant transmission-based precautions.

EBP in Practice: Scenario 1, Q6

Mr. Jones will remain at the facility due to his declining mental status. On month 3 of his stay, he begins having frequent loose stools. Norovirus is suspected due to four other residents with similar symptoms.

What type of precautions should Mr. Jones be placed on?

EBP in Practice: Scenario 1, Q6 Answer

What type of precautions should Mr. Jones be placed on since he is having frequent loose stools and norovirus is suspected?

Contact isolation per CDC guidelines should be used in the presence of acute diarrhea, draining wounds or secretions that cannot be covered or contained. EBP is not a substitute for Contact Precautions.

EBP in Practice: Scenario 1, Q7

Mr. Jones's diarrhea resolves, and he is feeling improved, so Contact Precautions are discontinued. One week later, he develops urinary retention and a Foley catheter is placed.

Does Mr. Jones need to be placed on any type of precautions at this point? If so, for how long?

EBP in Practice: Scenario 1, Q7 Answer

Does Mr. Jones need to be placed on any type of precautions? If so, for how long?

Due to the new invasive device (i.e., urinary catheter), Mr. Jones should be placed back on EBP. EBP should be maintained until his urinary catheter is removed.

EBP in Practice: Scenario 1, Q8

You're XYZ Nursing and Rehab's infection preventionist and you're conducting audits on EBP in the facility. You walk by Mr. Jones's room (who is on EBP).

- **What should you look for with the room and healthcare personnel (HCP) practices to ensure EBP are being implemented appropriately?**

EBP in Practice Scenario 1, Q10 Answer

What should you look for to ensure EBP are being implemented appropriately?

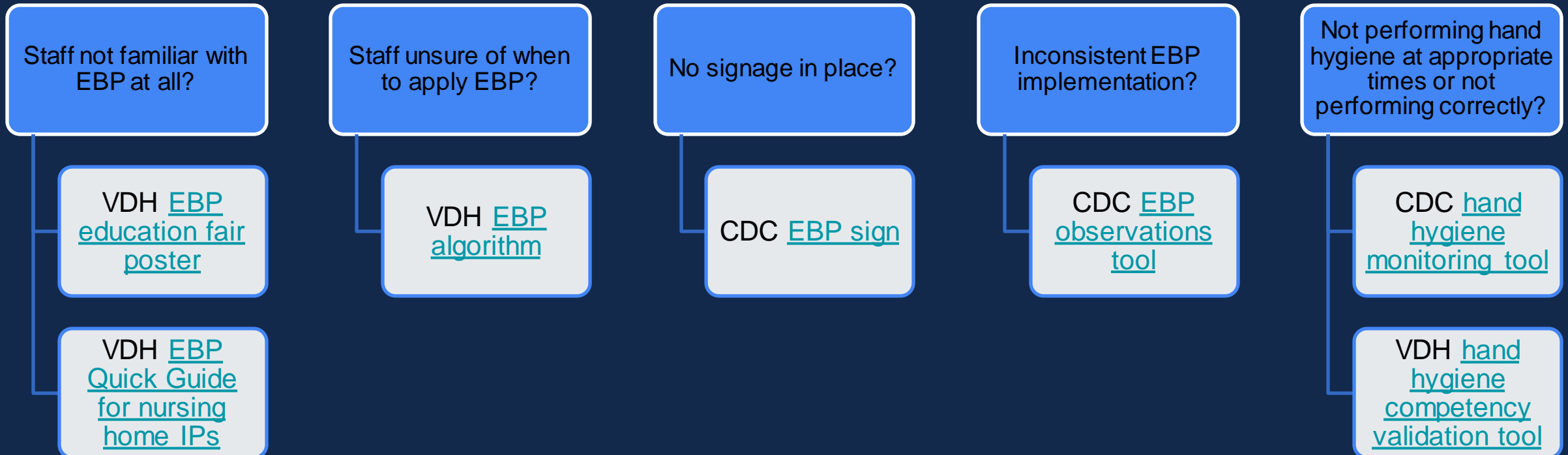
Room

- ✓ EBP **sign** on the door
- ✓ **PPE** (including gloves and gown) **near or outside the resident's room**
- ✓ Alcohol-based **hand sanitizer available**
- ✓ **Trash can** available to dispose of PPE
- ✓ **Dedicated noncritical care equipment** used (if supplies allow); if unavailable, clean and disinfect equipment before use on another resident

HCP Practices

- ✓ **Hand hygiene performed before entering the room**
- ✓ **Gloves, a gown** (and other PPE as needed) are **donned before high-contact resident care activities**
- ✓ **Hand hygiene is performed after PPE is removed**

What Resources Would You Provide to the Facility If They Are Not Using EBP Correctly?



In Summary: Putting the Pieces Together



Hand Hygiene



Environmental
Cleaning and
Disinfection



Enhanced
Barrier
Precautions



Auditing




Communication



Resources and References: CMS

- ***NEW*** QSO-24-08-NH: Enhanced Barrier Precautions in Nursing Homes (issued March 20, effective April 1)
 - New guidance for State Survey Agencies and LTC facilities on the use of EBP to align with nationally accepted standards.
 - The new guidance related to EBP is being incorporated into F880 Infection Prevention and Control.
 - More to come as we learn implications from our partners in the VDH Office of Licensure and Certification.

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop C2-21-16
Baltimore, Maryland 21244-1850



CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

Center for Clinical Standards and Quality/Quality, Safety & Oversight Group

DATE: March 20, 2024

TO: State Survey Agency Directors

FROM: Director, Quality, Safety & Oversight Group (QSOG)

SUBJECT: Enhanced Barrier Precautions in Nursing Homes

Ref: QSO-24-08-NH

Memorandum Summary

- CMS is issuing new guidance for State Survey Agencies and long term care (LTC) facilities on the use of enhanced barrier precautions (EBP) to align with nationally accepted standards.
- EBP recommendations now include use of EBP for residents with chronic wounds or indwelling medical devices during high-contact resident care activities regardless of their multidrug-resistant organism status.
- The new guidance related to EBP is being incorporated into F880 Infection Prevention and Control.

Background:
Multidrug-resistant organism (MDRO) transmission is common in long term care (LTC) facilities (i.e., nursing homes), contributing to substantial resident morbidity and mortality and increased healthcare costs. Many residents in nursing homes are at increased risk of becoming colonized and developing infections with MDROs.

<https://www.cms.gov/files/document/qso-24-08-nh.pdf>

Resources and References: CDC

- CDC Implementation of Personal Protective Equipment in Nursing Homes to Prevent Spread of Multidrug-Resistant Organisms:

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

- [Frequently Asked Questions](#) About EBP in Nursing Homes
- Pre-implementation tool
- Posters
- Sign
- [Observation tool](#) and observation tool summary spreadsheet
- [Staff pocket guide](#)
- Video ([English](#) and [Spanish](#))
- Letters explaining EBP for [residents/families](#), [staff](#), and [leadership](#)

Resources and References: VDH

VDH Infection Control Precautions & Considerations by Healthcare Setting > Enhanced Barrier Precautions for Nursing Homes webpage:

<https://www.vdh.virginia.gov/haiar/ip/ipc-by-healthcare-setting/>

- Implementation algorithm
- Frequently asked questions
- Quick guide for nursing home infection preventionists
- Education fair poster

Questions?

hai@vdh.virginia.gov

Additional Case Studies

Case Scenario 2

EBP in Practice: Scenario 2, Q1

Ms. Alice Smith is a resident in XYZ nursing home's memory care unit. She recently had a fall and required admission to a hospital. Upon admission to the hospital, a MRSA surveillance nares screening returned positive. She was placed on Contact Precautions during her hospital stay. Ms. Smith is now being readmitted to memory care.

Will Ms. Smith require Contact Precautions in memory care for the MRSA colonization?

EBP in Practice: Scenario 2, Q1

Will Ms. Smith require Contact Precautions upon readmission to the nursing home memory care unit?

No. In the nursing home environment, EBP is used to manage residents with MDROs including MRSA.

Note: this assumes Ms. Smith does not have acute diarrhea, a draining wound that can't be covered, or another indication for Contact Precautions.

EBP in Practice: Scenario 2, Q2

For Ms. Smith's MRSA nares colonization, when will you be able to discontinue EBP?

EBP in Practice: Scenario 2, Q2

For Ms. Smith's MRSA nares colonization, when will you be able to discontinue EBP?

Because of her history of MDRO colonization, EBP will be used for the duration of Ms. Smith's stay. EBP addresses the continued risk of transmission from MDRO colonization which can persist for long periods of time and result in spread within a facility.

EBP in Practice: Scenario 2, Q3

Ms. Smith is frequently found walking in the hallways. She also likes to sit with several other residents in the area around the nursing station.

Due to her history of MDRO and the need for EBP, what other general infection prevention measures should be used to prevent the spread of MDRO in your facility?

EBP in Practice: Scenario 2, Q3

Due to her history of MDRO and the need for EBP, what other general infection prevention measures should be used to prevent the spread of MDRO in your facility?

Good hand hygiene practices by staff and frequent cleaning of high touch surfaces should remain a priority in all communal living areas. MDRO colonization status of residents is not always known, and these infection prevention measures should be used for all residents.

EBP in Practice: Scenario 2, Q4

Ms. Smith has been more confused lately, with increased urinary incontinence, and a fever of 101.3. A urine culture was obtained that showed a significant growth of MRSA. She is diagnosed with a UTI and antibiotic treatment is begun.

What precautions should Ms. Smith now be placed on?

EBP in Practice: Scenario 2, Q4

What precautions should Ms. Smith now be placed on?

Ms. Smith should remain on EBP. The presence of an active infection does not require a change to Contact Precautions in most cases (unless there is a change in the presence of a wound that cannot be contained, uncontrolled drainage, or infectious diarrhea).

EBP in Practice: Scenario 2, Q5

Ms. Smith has been incontinent due to urinary tract infection and is wearing incontinence briefs.

Would EBP be necessary if a healthcare worker will be helping dress Ms. Smith but not removing the briefs and thus have no exposure to the MDRO source (the urine)?

EBP in Practice: Scenario 2, Q5

Would EBP be necessary if a healthcare worker will be helping dress Ms. Smith but not removing the diapers and thus have no exposure to the MDRO source (the urine)?

*For EBP, the site of the organism does not determine when PPE is required. It is the **activity** that determines when PPE should be used. Dressing Ms. Smith would be considered a **high-contact resident care activity** and require use of a gown and gloves.*

Thank you

Visit the VDH HAI/AR Website:

<https://www.vdh.virginia.gov/haiar/>

Contact Us:

hai@vdh.virginia.gov