

Enhanced Barrier Precautions (EBP)

Your Implementation Guide

Updated April 2024



This presentation is produced and presented by Carilion Clinic through the Virginia Long-Term Care Infrastructure Pilot Project (VLIPP)

Carilion VLIPP (2022-2024) is funded by the Virginia Department of Health to support long-term care facilities in Southwest Virginia with their infection prevention and control programs.

Disclaimer

- For educational purposes only
- No endorsement of products, software, or tools

Audience

- Infection Preventionist
- Administration
- Clinical Staff

Objectives



Describe the importance of and when to use EBP



Identify which patients would require EBP



Explain how to implement EBP



Analyze potential barriers and solutions

Introduction to Enhanced Barrier Precautions (EBP)



Multidrug-resistant organisms (MDROs) are most commonly transmitted in nursing homes, increasing morbidity and mortality and resulting in increased healthcare costs.



Estimated 50% of nursing home residents are colonized with at least one antibiotic resistant organism



Candida auris infections are a growing problem in healthcare facilities with estimated 1 in 3 people dying from infection



Studies have found use of EBP for residents with indwelling medical devices reduced acquisition of MDROs, CAUTIs, and MRSA

What is Enhanced Barrier Precautions?

- The targeted use of gowns and gloves during high contact resident care activities with the goal of reducing transmission of MDROs
- Supplement to standard precautions and existing isolation guidelines meant to reduce transmission of microorganisms that may result in infection
- Required PPE includes gown and gloves

Enhanced Barrier Precautions – Benefits

Allows residents to participate in communal activities

Does not require private rooms

Requires PPE for only high-contact care interactions

Should be used for the resident's entire stay at the facility

Reduces the risk of a resident acquiring an MDRO at the facility

Resident High Contact Activities Requiring EBP



<https://www.cdc.gov/hai/pdfs/containment/enhanced-barrier-precautions-sign-P.pdf>

- Dressing
- Bathing
- Changing linens
- Wound care
- Device maintenance
- Not required for only entering the room, speaking with the patient, or handing off medications

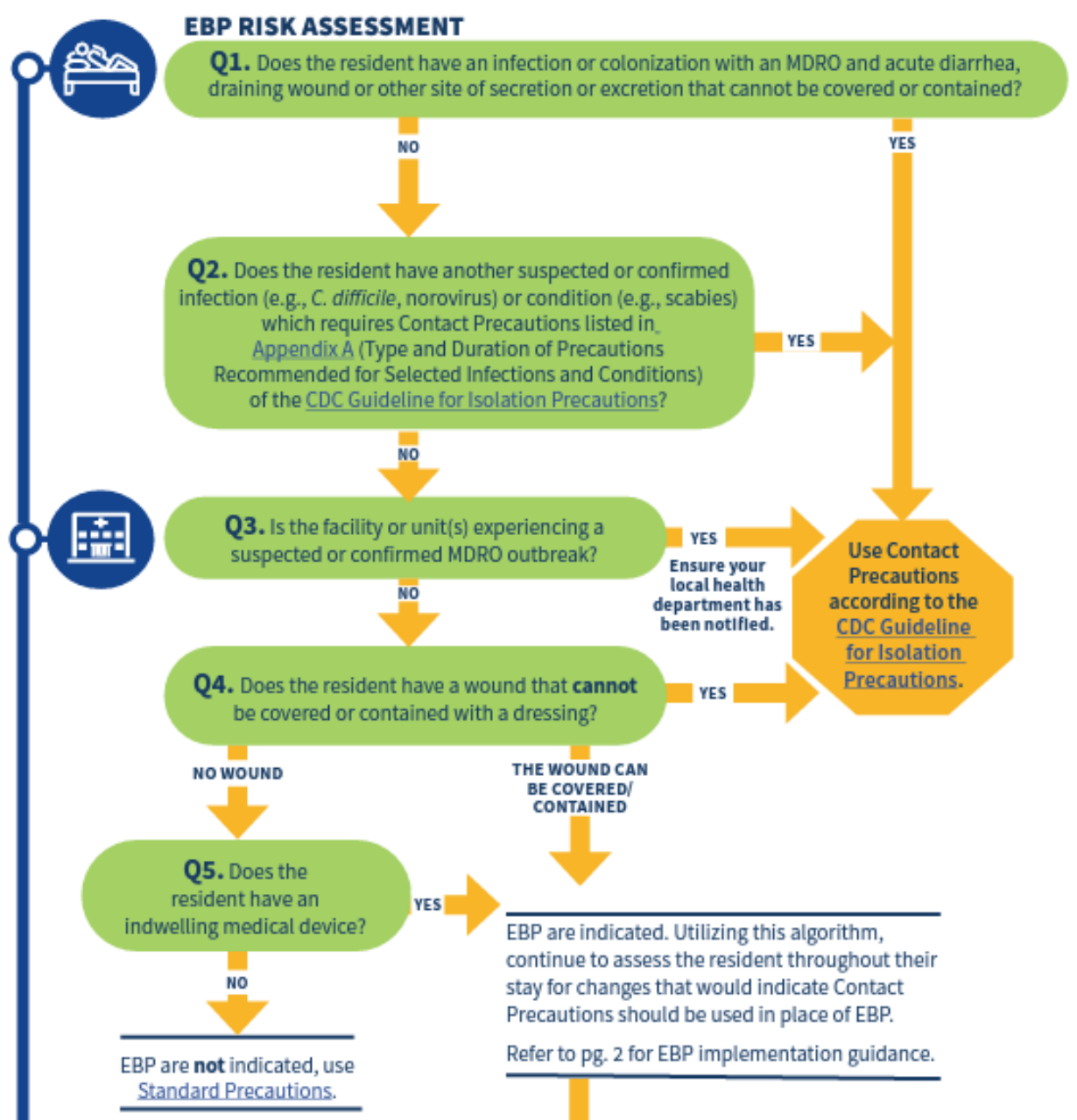
When to Implement EBP

- Enhanced Barrier Precautions can be applied (when Contact precautions do not otherwise apply)
- EBP applies to residents with any of the following:
- Infection or colonization with an MDRO
- Wounds or indwelling medical devices, regardless of MDRO colonization status
 - Medical devices may include central line, urinary catheter, Tracheostomy tubes etc.
 - Wounds that are chronic including, but are not limited to, pressure ulcers, diabetic foot ulcers, unhealed surgical wounds, and chronic venous stasis ulcers.
 - Superficial and short-term wounds requiring band aids, e.g. skin tears do not require EBP.



EBP Assessment Tool

Use the following Risk Assessment Flowchart created by the VDH to determine if a resident should be placed on EBP




How to Implement



- Make clean PPE readily accessible in or near resident rooms




- Provide an appropriate receptacle for disposal of used PPE



- Post EBP signs on or beside the door to make precautions clear to those who are entering the room



- Make handwashing and hand sanitizing stations available



- Create a template for a care plan that allows consistent treatments for residents



- Educate staff, residents, and family members on the importance of EBP



- Conduct audits to continuously improve performance

What to Wear for EBP

- Gown and gloves
- Important to perform hand hygiene when entering and exiting the room
- Use this PPE for duration of stay or until wounds are healed and devices are removed
- **PPE should be changed between every interaction with residents**



https://www.google.com/url?sa=i&url=https%3A%2F%2Feneos-materials-trading.com%2Fen%2Fproducts%2Fgloves_gowns%2F&psig=AOvVaw1-kDe1bNTE-DTe3-BDo3_P&ust=1687537524076000&source=images&cd=vfe&ved=OCBAQjRxqFwoTCMjftKil1_8CFQAAAAAAdAAAAABAF

Other Types of Precautions

Standard precautions

- Minimum infection prevention practices that apply to all patients in a healthcare setting

Contact precautions

- Practices that are meant to prevent the spread of an infectious agent which are spread through direct or indirect contact with a patient or their environment

When to Use Contact or Standard Precautions



Standard (All Residents) - Applies to any potential exposure to blood, bodily fluids, mucous membranes, non-intact skin, and potentially contaminated environmental surfaces or equipment



Contact – All residents infected or colonized with a novel or targeted multidrug-resistant organism AND presence of acute diarrhea, draining wounds, or secretions that cannot be contained

When to...



Transition to Contact Precautions

- When a unit is having increased MDRO transmission or an outbreak
- When a resident develops another infection that requires Contact Precautions



Remove Enhanced Barrier Precautions

- When resident is no longer at your facility
- When wounds are healed and no longer draining
- When indwelling medical devices are removed

Your Role in EBP Implementation and Management

- Infection Preventionist
 - Responsible for determining when an individual needs to be placed on, changed, or taken off specific precautions
 - Providing education on infection prevention materials to staff
 - Conduct audits to ensure protocols are being followed
 - Collect and analyze health data to improve outcomes within the facility
 - Promote and maintain a safe and sanitary environment of care

Your Role in EBP Implementation and Management

- Nursing staff
 - Adhere to isolation precautions in order to provide the best care possible to every resident
 - Have a responsibility to educate themselves on isolation requirements before engaging with residents
 - Clean and disinfect facility areas and equipment
 - Implement measures to help minimize infection control risks
 - Recognize signs and symptoms that could result from poor infection control measures

Your Role in EBP Implementation and Management

- Non-nursing staff
 - Have a responsibility to educate themselves on and adhere to isolation requirements before engaging with residents
 - Should be comfortable asking questions to nursing staff or the IP if they are unfamiliar with signage
 - Clean and disinfect facility areas and equipment
 - Implement measures to help minimize infection control risks

EBP Quality Assurance



Routinely conducting audits on adherence to isolation precaution guidelines is a crucial aspect to improving performance



Staff should be monitored when entering and exiting a room to see if they follow the appropriate guidelines



Necessary to share results back with staff so that they are aware of areas that they can improve in



Allows for standards to be set and remedial measures to be implemented

Anticipated Barriers to Enhanced Barrier Precautions



Residents may feel “singled out”



The age and layout of the facility makes implementation plans differ greatly



Additional costs for SNF with purchasing appropriate equipment/PPE



Minimal staff participation due to extra steps, effort, and education

Solutions



Educate residents that EBP will allow them to be more involved in social activities



Create a facility condition assessment plan to help identify risks posed by aging infrastructure and ways to address those issues



Create an auditing system for PPE management and request PPE from the Near Southwest Preparedness Alliance



Staff training and education is crucial so that they understand how these extra steps will reduce their overall workload while also providing a higher quality of life to the residents

Scenario

- Mrs. Smith was admitted to your facility with a urinary catheter in place. She has no history of an MDRO, but Mr. Jones in her unit is colonized and has a draining wound.
 - Should Mrs. Smith be placed on EBP?
 - Yes! This will prevent transmission to her from the other resident.
 - Should Mr. Jones be on EBP?
 - No! Since he has an MDRO and a draining wound, he should be on contact precautions.

References

Biology Online (2022) Infection. Retrieved from: <https://www.biologyonline.com/dictionary/infection>

CDC (2022, August 4) Pathogen Reduction & Decolonization to Prevent Infections. Retrieved from: <https://www.cdc.gov/drugresistance/microbial-ecology/decolonization.html>

CDC (2018, December 21) Candida auris: A Drug-resistant Germ That Spreads in Healthcare Facilities. Retrieved from: <https://www.cdc.gov/fungal/candida-auris/c-auris-drug-resistant.html>

CDC (2022, July 12) Implementation of Personal Protective Equipment (PPE) Use in Nursing Homes to Prevent Spread of Multidrug-resistant Organisms (MDROs) Retrieved from: <https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html>

CDC (2022, July 27) FAQs about Enhanced Barrier Precautions in Nursing Homes: <https://www.cdc.gov/hai/containment/faqs.html>

References

CDC (2022, July 28) Considerations for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities: <https://www.cdc.gov/hicpac/workgroup/EnhancedBarrierPrecautions.html>

Lydecker AD, Osei PA, Pineles L, et al. Targeted Gown and Glove Use to Prevent Staphylococcus aureus Acquisition in Community-Based Nursing Homes: A Pilot Study. Infection Control & Hospital Epidemiology 2020:1-7.

Mody L, Krein SL, Saint S, et al. A Targeted Infection Prevention Intervention in Nursing Home Residents with Indwelling Devices: A Randomized Clinical Trial. JAMA Internal Medicine 2015;175:714-23.

VDH (2022, November 16) Enhanced Barrier Precautions for Nursing Homes. Retrieved from: https://www.vdh.virginia.gov/content/uploads/sites/174/2022/10/FAQ-about-EBP_July-2022-updates-1.pdf