Enhanced Barrier Precautions (EBP) Toolkit

Health Quality Innovation Network

Introduction

In November 2019, the Centers for Disease Control and Prevention (CDC) asked the Healthcare Infection Control Practices Advisory Committee (HICPAC) for input on long-term care populations and the use of EBP. HICPAC developed the Long-Term Care/Post-Acute Care (LTC/PAC Workgroup) to provide input. This workgroup provided input from 2020-2022, leading to the CDC guidance: Consideration for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities.

It was determined that multidrug-resistant organism (MDRO) transmission is common in LTC facilities; up to 50% of residents are colonized with an MDRO. MDRO outbreaks can be a significant source of mobility and mortality to residents due to limited treatment options. Focus on active infections was not sufficient to address transmission from colonized residents, standard precautions were not enough to protect others, while indefinite isolation caused significant psychological harm to residents and was impractical to maintain. The goal of EBP was to strike a balance between quality of life and risk of MDRO transmission, as for many residents, EBP will be in place for the duration of their LTC stay.

On March 20, 2024, the Centers for Medicare and Medicaid Services (CMS) issued guidance for LTC facilities in QSO-24-08-NH that EBP be incorporated into F880 Infection Prevention and Control to be implemented for during high contact activities for residents with targeted MDROs, chronic wounds and indwelling devices (see sample policy for definitions) by making sure staff are trained in the proper use of personal protective equipment (PPE) and the availability of PPE and hand hygiene (HH) supplies at the point of care.

EBP includes using standard precautions **and** gown/glove during these high-contact resident care activities as they provide the greatest opportunity to transfer MDROs to staff hands/clothing. (When contact precautions/isolation are required for active infection, contact precautions take precedence until the active infection is resolved, at which time EBP is implemented). (Frequently Asked Questions [FAQ] about EBP in Nursing Homes)

This toolkit will serve as a guide to assist LTC facilities through implementation of EBP in their facility using information obtained from the CDC guidance, Consideration for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities.

Step 1

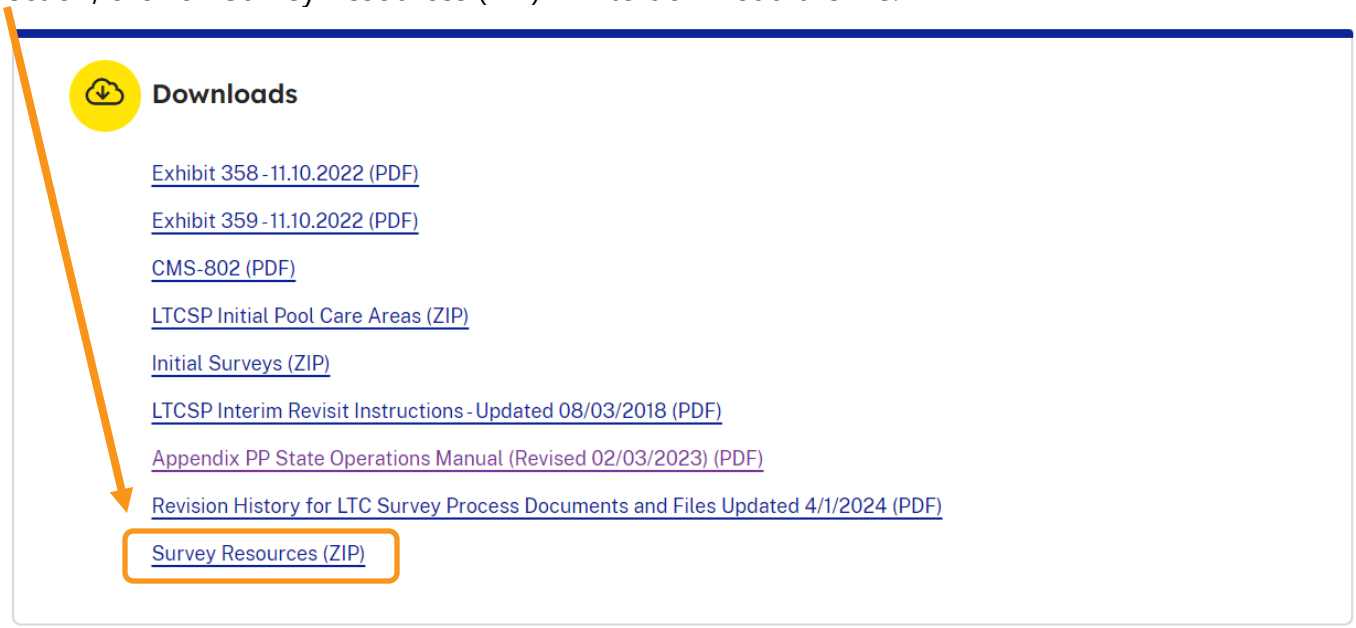
Complete the Pre-implementation Tool-EBP from the CDC to assess readiness to implement EBP or to address gaps in current process.

Step 2

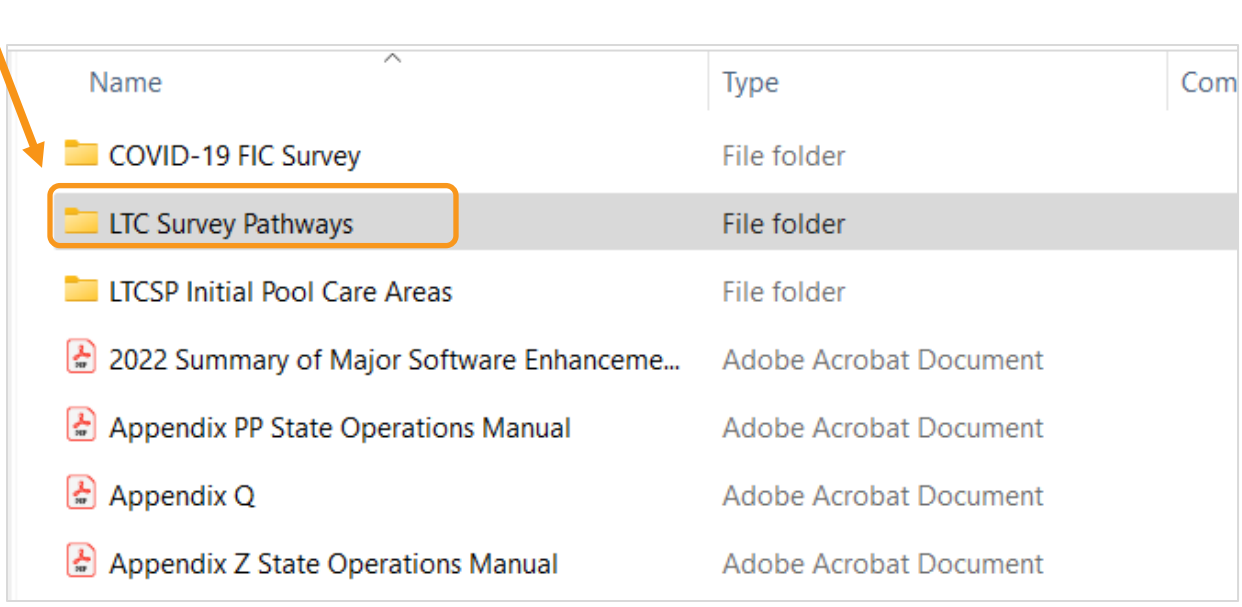
Create policies and procedures to address EBP. Use the sample Enhanced Barrier Precautions policy below to review/adapt for your facility. You can also use the Enhanced Barrier Precautions Decision Tree for a quick reference algorithm. Be sure to also review the CMS Critical Element Pathways for:

- Infection Control and Prevention
- Urinary Catheters
- Dental
- Dialysis
- Pressure Ulcers
- Respiratory Care
- Tube Feedings

To access the Critical Element Pathways, visit the CMS Nursing Homes Medicare and Medicaid Programs; Reform of Requirements for Long-Term Care Facilities page, navigate to the Downloads section, click on Survey Resources (ZIP) link to download the file.



From the downloaded zip file, access the individual Critical Element Pathways files in the LTC Survey Pathways folder.



Sample EBP Policy

Use to review your facility's existing policy or copy and edit to create a policy for your specific facility.
This is a guide only and is not endorsed by any regulatory agency.

Enhanced Barrier Precautions

Effective Date:
Approved By:
Review/Revised Date:

Purpose:
To reduce the risk of transmission of multidrug-resistant organisms (MDROs) in the facility.

Definitions:
Enhanced Barrier Precautions (EPB): refer to an infection control intervention designed to reduce transmission of targeted MDROs that employs targeted gown and glove use during high contact resident care activities. EPB are used in conjunction with standard precautions and expand the use of personal protective equipment (PPE) to donning of gown and gloves during high-contact resident care activities. They do not take the place of transmission-based precautions for active infections and are to be used for residents with a history of targeted MDRO(s) or are at risk of contracting an MDRO due to the presence of an indwelling medical device or chronic/open wound (definitions below).

High Contact Activity: activities that have been demonstrated to result in transfer of MDROs to hands and clothing of healthcare personnel and occur in the resident's room, shower/bathroom, or therapy room (they generally do not apply to settings outside of these areas for resident dignity and privacy during times with less contact/less risk-the facility must specify which settings outside of these require EBP):

- Dressing
- Bathing/showering
- Transferring
- Providing hygiene (brushing teeth, combing hair, and shaving)
- Changing linens (linens are washed per normal facility protocol)
- Changing briefs or assisting with toileting
- Device care or use (see indwelling medical devices that require EBP)
- Wound care: any skin opening requiring a dressing (see wounds that require EBP)
  *Phlebotomy alone is not considered a high contact activity unless it is paired with other high contact activities

Wounds that require EBP: include but are not limited to chronic/open wounds that typically require dressing changes such as pressure injuries (PIs), venous/arterial/diabetic/neuropathic ulcers, open or blistered burns. (excludes stage I pressure injuries, small skin breaks/tears/abrasion that can be covered with a simple adhesive bandage, and well approximated/healing surgical incisions).

Indwelling devices that require EBP: include but are not limited to Foley and suprapubic catheters, central lines including peripherally inserted central catheter (PICC) lines, midline catheters, tracheostomies, feeding tubes or drains (excludes devices entirely covered by skin, peripheral IVs, hypodermoclysis, ostomies, continuous glucose monitors, insulin pumps nasogastric tubes and rectal tubes of short duration as defined by the facility).

Personal Protective Equipment (PPE): used to reduce the risk of exposure to and transmission of microorganisms. Includes the use of gowns, gloves, face protection (mask or respirator) and eye protection (goggles or face shield).

Current Targeted MDROs from CDC:

- Pan-resistant organisms
- Carbapenemase-producing carbapenem-resistant *Enterobacterales*
- Carbapenemase-producing carbapenem-resistant *Pseudomonas*
- Carbapenemase-producing carbapenem-resistant *Acinetobacter baumannii*
- *Candida auris*

Epidemiologic important MDROs may include but are not limited to:

- Methicillin-resistant *Staphylococcus aureus* (MRSA)

- Extended-spectrum beta-lactamase (ESBL)-producing *Enterobacterales*
- Vancomycin-resistant *Enterococci* (VRE)
- Multidrug-resistant *Pseudomonas aeruginosa*
- Drug-resistant *Streptococcus pneumoniae*
- Other determined epidemiologically important organisms (based on state/local public health and identified by facility infection control risk assessment or as directed by public health officials during MDRO outbreaks).

Policy Statement:
The facility will implement a process to evaluate the facility and individual resident risk for MDROs and implement interventions to reduce transmission of MDROs to other staff and residents.

Procedure:
- The facility will conduct an annual infection control risk assessment that includes The Centers for Disease Control and Prevention (CDC) targeted MDROs and guidance from local/state health departments and the facility medical director to determine if other epidemiologically important MDROs rise to a level of concern, or as directed by public health departments in response to outbreaks. Those will be concluded in the facilities' list of targeted MDROs.
- Residents with a history of or who are known to be colonized with a targeted MDRO will be placed in EBP for the duration of their stay. A negative test will not negate the need for EBP.
- Residents with an indwelling medical device, or a wound (as described above) and no history of MDROs will be placed in EBP until their wound heals or the device is removed.
- Residents will be evaluated for the need for EBP upon admission, with a significant change in condition, quarterly, with antibiotic use, with placement of a medical device, or with the development of a new skin condition by incorporating EPB into assessments and order sets for new wounds, medical devices, and antibiotic use.
- The facility must determine which brief low contact activities may not require EBP when entering the resident room, what to do in cases of emergency, how to handle EBP when a resident is cognitively impaired or impulsive, and how to handle PPE when going from room to hallway during ambulation. These situations may be determined at the facility level, or individually in each resident care plan.
- If deviations from the policy are required due to facility/room issues, they will be written into the facility assessment.
- The need for EBP will be included in each resident's care plan. If alterations are required due to resident specific concerns, the interdisciplinary team should review and add to the resident's care plan.
- The facility should develop a system to communicate the need for EBP and maintain a list of residents on EBP. The Director of Nursing, Infection Preventionist, the Environmental Services Manager, and the Primary Care Physician should be notified of the need for EBP.

- The resident and/or resident representative will be educated on the resident's need for enhanced barrier precautions prior to admission (when known), or as soon as the need for EBP is known. This documentation will be signed and kept as a part of the medical record.
- Staff training regarding EBP will be conducted upon hire, annually, if changes occur, and as needed.
- Routine skill, competency, and/or compliance audits will be conducted by Infection Preventionist or designee across all disciplines/shifts and will be reported at Infection Control and Quality Assurance meeting. The frequency of audits will be determined by the Infection Control Risk Assessment or as directed by the Quality Assurance and Performance Improvement (QAPI) plan.
- Soiled laundry is handled with gown/gloves and soiled dishes are handled with gloves per standard precautions dictate-biohazard/special handling are not required.
- Residents on EBP do not require a private room and are not restricted from leaving their room. When residents are placed in shared rooms, the facility must implement strategies to minimize pathogens between roommates.
    - Maintain separation of at least three feet between beds.
    - Use of privacy curtains.
    - Cleaning and disinfecting of shared medical equipment and increased cleaning of environmental services with readily available EPA-approved disinfectant. Routine surveillance will be conducted, and results reported to the QAA and IP meeting.
    - Staff must doff PPE and perform hand hygiene after working with residents in EBP before providing any care or assistance to roommate/other residents.
    - Reevaluate need for transmission-based precautions (TBP) if the resident develops an active infection. Continue TBP according to CDC Appendix A Isolation Precautions (LINK IN RESOURCES) until they no longer meet the criteria for TBP, then resume EBP.
- When initiating EBP
    - Post EBP signate at the door or designated area.
    - Mount alcohol-based hand rub in and outside of the resident door.
    - Ensure PPE and disinfectant are present, ordered, and restocked routinely and placed at entrance of room.
    - Ensure trash receptacle is present at the room exit and is frequently checked to prevent overflow. Biohazard bags are not required. (If using washable gowns, they may only be used once then laundered. Ensure you have a receptacle placed at room exit for doffing, a process for retrieving for laundering, and that you follow the manufacturer guidelines for laundering and frequency of replacement).
    - Bundle care activities when possible.
    - When transferring residents between levels of care/care facilities, communicate resident-specific EBP information. (See CDC sample form.)

EBP is used in the resident's room, in the bath/shower room, and in the rehab room when high-contact activities are performed. EBP is not used in environments outside of the resident's room, bath/shower room, and rehab room unless specified in the facility assessment, policy, or resident care plan.

Resources:

- Frequently Asked Questions, CDC
- Memo: QSO24-08-NH, CMS
- Implementation of Personal Protective Equipment (PPE) Use in Nursing Homes to Prevent Spread of Multidrug-resistant Organisms (MDROs), CDC
- Appendix A: Table 2. Clinical Syndromes or Conditions Warranting Empiric Transmission-Based Precautions in Addition to Standard Precautions, CDC
- Inter-Facility Infection Control Transfer Form, CDC

Step 3

Use these risk assessments to further guide policies and procedures as well as incorporate infection control and EBP into your Facility Assessment.

- Risk Assessment: Infection Events
- Risk Assessment: Infection Prevention and Control Practice Failures

Step 4

Educate all residents, families, and staff annually, with changes, and as needed on EBP with this CDC training video, Enhanced Barrier Precautions in Nursing Homes.

Use these resources to share information and check competency.

- EBP Competency Test
    - EBP Competency Test – Answer Key
- Letters to Nursing Home Staff, CDC
- Letters to Residents, Families, Friends and Volunteers, CDC

Step 5

Educate local hospital discharge planners on EBP in LTC. Help them prepare residents and families for the need to use EBP for MDROs with this Letter to Hospital Discharge Planners.

Step 6

Complete the Resident Evaluation Tool for EBP. Initiate EBP as indicated, posting the CDC EBP Signage, (or implementing your unique facility protocol) and ensuring, and supplies (i.e. PPE, alcohol-based hand rub [ABHR], trash can) are available and there is a process for ordering and restocking.

Step 7

When EBP is required for a resident, provide residents/resident representative with resident specific education regarding EBP using Letters to Residents, Families, Friends, and Volunteers. Have resident or resident representative sign the completed assessment for validation of resident/resident representative education regarding EBP.

Step 8

Add EBP to the resident's care plan. Be sure to indicate any individualized interventions or variations from policy due to unique circumstances.

Step 9

Audit your facilities compliance with EBP using the CDC EBP Implementation-Observations Tool and/or Audit Tool EBP. Routine skill, competency and/or compliance audits will be conducted by infection preventionist (IP) or designee and will be reported at Infection Control and Quality Assurance meeting. The frequency of audits will be determined by the Infection Control Risk Assessment or as directed by the Quality Assurance and Performance Improvement (QAPI) plan, increasing surveillance at implementation and if issues are noted.

With careful planning, effort and teamwork, your facility can use EBP to decrease the risk of MDRO transmission to your staff, residents, families and visitors.

Additional Assistance

Contact your Health Quality Innovation Network Quality Improvement Advisor at ltc@hqi.solutions **or** email questions directly to CMS DNH_TriageTeam@cms.hhs.gov or CDC cdcinfo@cdcinquiry.onmicrosoft.com.

This material was prepared by the Superior Quality Health Alliance and has been modified by Health Quality Innovators (HQI), a Quality Innovation Network-Quality Improvement Organization (QIN-QIO) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 12SOW/HQI/QIN-QIO-0877-09/18/24