

Enhanced Barrier Precautions Revisited

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Disclosure

- None of the planners for this educational activity have relevant financial relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, reselling, or distributing healthcare products used by or on patients.

Objectives



DISCUSS THE REGULATIONS
RELATED TO ENHANCED
BARRIER PRECAUTIONS (EBP)



DESCRIBE A FRAMEWORK FOR
APPLYING EBP AND EVALUATING
COMPLIANCE



REVIEW FREQUENTLY ASKED
QUESTIONS

Goals of Infection Prevention

- Protect the resident
- Protect others in the healthcare facility
- Cost-effective

**What is the goal
of infection
control in
healthcare?**



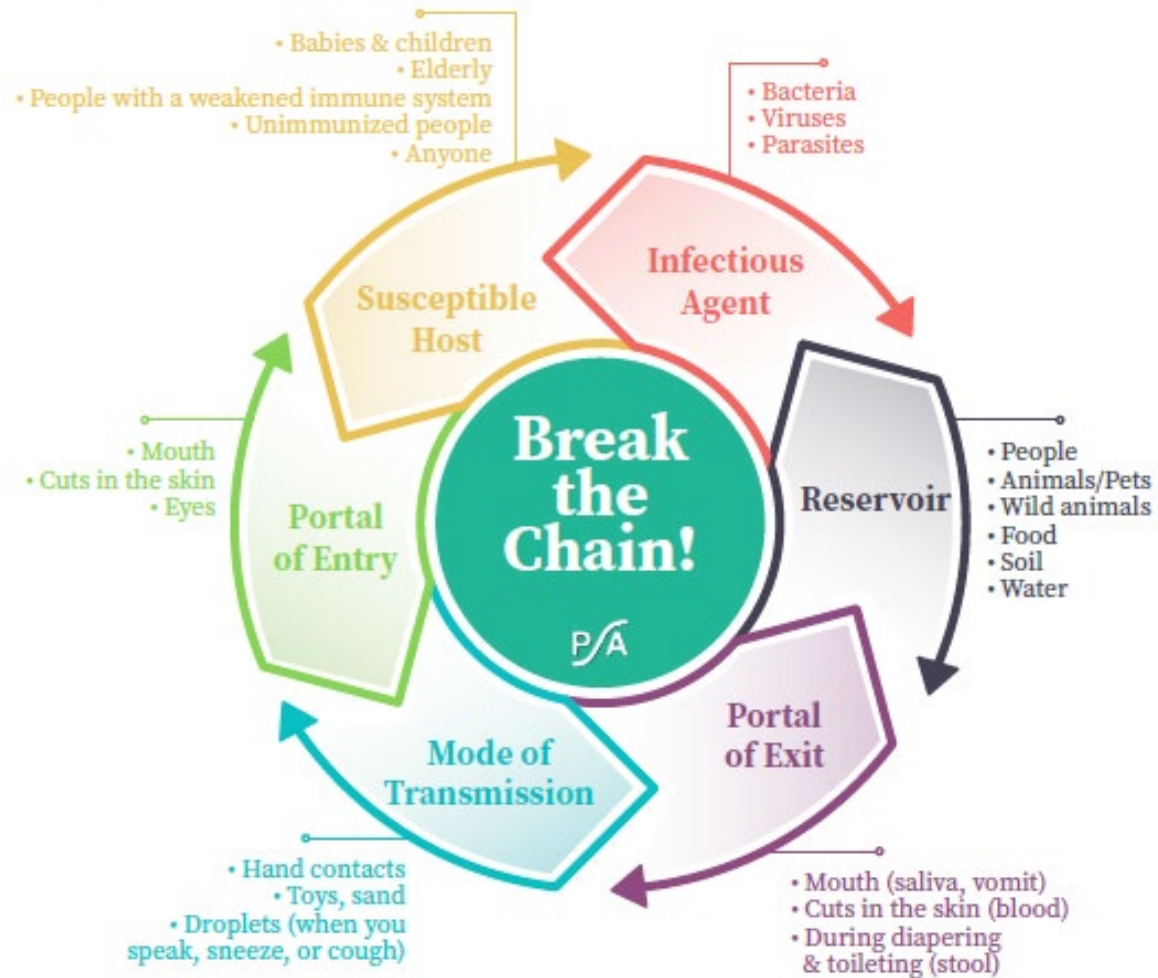
Minimize the Exposure!

- Chain of transmission
- Hand hygiene
- Standard Precautions
- Transmission-based Precautions
- Enhanced Barrier Precautions



Chain of Transmission

Break the Chain—Stop the Spread!



Resident Characteristics

- Residents are at increased risk of colonization and infection with a MDRO
- >50% of LTC residents are colonized with a MDRO
- Infections caused by a MDRO have increased cost, impact the health and safety of residents
- Frequent hospitalizations



Colonization vs Infection

- Challenges with contact precautions
- Active infection with an MDRO requires contact precautions
- Colonization can persist for a long time
- Silent transmission
- Pan resistant organisms and novel mechanisms of resistance are emerging

Colonization



What are Enhanced Barrier Precautions (EBPs)?




- EBPs are designed to reduce the spread of multidrug resistant organisms (MDROs) by expanding the use of gloves and gowns during high contact resident care activities, especially for those at increased risk of acquiring or spreading a MDRO

Regulation QSO-24-08-NH

- Enhanced Barrier Precautions in Nursing Homes to Prevent Spread of Multidrug-resistant Organisms (MDROs)
- Use of PPE for residents with targeted organisms, chronic wounds or indwelling medical devices during high-contact resident care activities
- Incorporated into F880 Infection Prevention and Control
- March 20, 2024

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



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

DATE: March 20, 2024 Ref: QSO-24-08-NH

TO: State Survey Agency Directors

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

SUBJECT: Enhanced Barrier Precautions in Nursing Homes

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.

In 2019, CDC introduced a new approach to the use of personal protective equipment (PPE) called Enhanced Barrier Precautions (EBP) as a strategy in nursing homes to decrease transmission of CDC-targeted and epidemiologically important MDROs when contact precautions do not apply. The approach recommended gown and glove use for certain residents during specific high-contact resident care activities associated with MDRO transmission and did not involve resident room restriction.

As described in the Healthcare Infection Control Practices Advisory Committee (HICPAC) white paper, "[Consideration for the Use of Enhanced Barrier Precautions in Skilled Nursing Facilities](#)" dated June 2021, more than 50% of nursing home residents may be colonized with an MDRO. This report noted that the use of contact precautions to prevent MDRO transmission involves restricting residents to their rooms, which may negatively impact a resident's quality of life and psychosocial well-being. As a result, many nursing homes only implemented contact precautions when residents are infected with an MDRO.

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Rationale for Enhanced Barrier Precautions

- Many nursing home residents unknowingly being colonized with a MDRO.
- The need for broader approaches to reduce the spread of MDROs without isolating residents for long periods of time.
- Studies indicate that the use of EBP can effectively reduce the spread of MDROs.



Rationale for Enhanced Barrier Precautions

- Contact precautions creates challenges for nursing homes trying to balance the use of PPE and room restriction with residents' quality of life
- Contact precautions implemented only when residents are infected with an MDRO
- MDRO colonization can persist for long periods of time (e.g., months) and result in silent transmission
- Organisms that are pan-resistant or have novel mechanisms of resistance are emerging

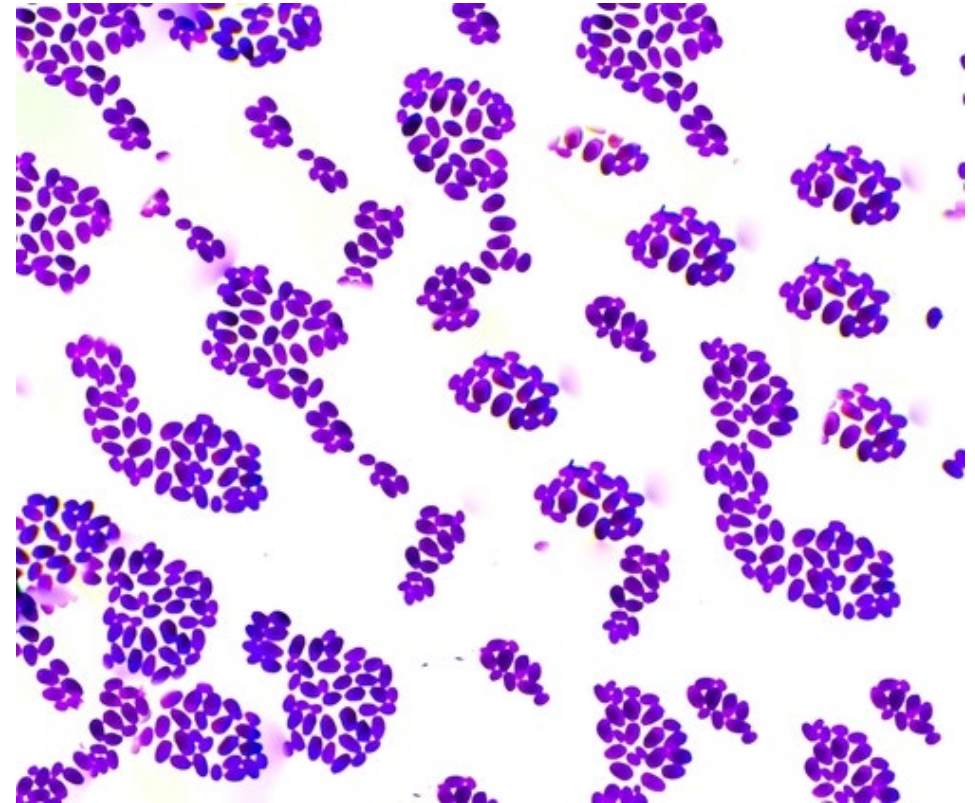
When do you use EBP?

- Residents with:
 - Infected or colonized with a targeted organism or MDRO where contact precautions don't apply
 - Indwelling medical device
 - Wounds

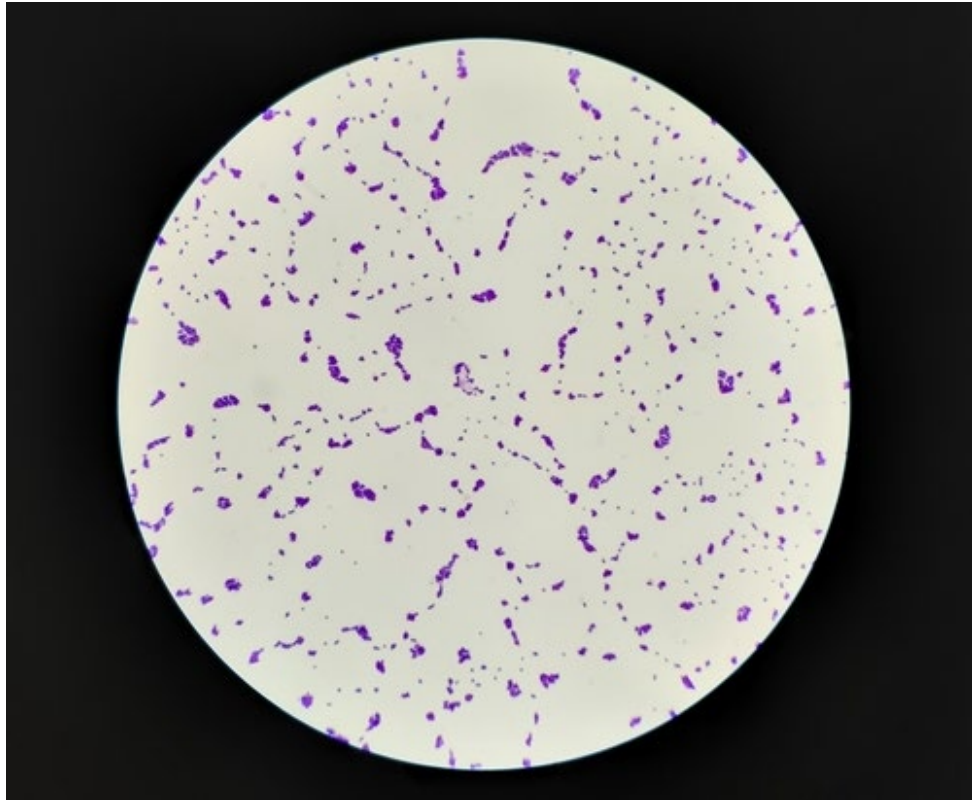
MDROs

Examples of MDROs currently targeted by CDC include:

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



MDROs



Examples of MDROs that might be epidemiologically important locally:

- Methicillin-resistant *Staphylococcus aureus* (MRSA),
- ESBL-producing Enterobacterales,
- Vancomycin-resistant Enterococci (VRE),
- Multidrug-resistant *Pseudomonas aeruginosa*,
- Drug-resistant *Streptococcus pneumoniae*

Residents are at Increased MDRO Risk

- Invasive medical devices
- Improper use of antibiotics
- Poor hand hygiene
- Ineffective environment cleaning
- Resident challenges – acuity, mentation, “stuff”
- Congregate living
- Staffing turnover
- Dependence on unlicensed caregivers
- Blunted immune responses

Wounds

- Skin opening requiring a dressing
- Chronic wounds
 - Pressure ulcers
 - Diabetic foot ulcers
 - Chronic venous stasis ulcers



High Contact Care Activities

Dressing

Bathing/showering

Transferring

Providing hygiene

Changing linens

Changing briefs or
assisting with toileting

Caring for devices (e.g.,
central line, urinary
catheter, feeding tube,
tracheostomy/ventilator)

Caring for wounds (any
skin opening requiring a
dressing)

How long should EBP be used?

Length of stay
for MDRO

Until a wound is
healed

Length of time
an indwelling
device us utilized

Framework for Applying EBP

- Staff education and training with proof of competency
- Develop a method to identify residents with wounds, indwelling devices, MDROs
- Develop policies and procedures for EBP
 - Signage indicating required PPE and defining high-risk care activities
 - PPE available outside of room
 - Hand hygiene
 - PPE disposal

Framework for Applying EBP

- Cost considerations
- Optimize PPE supply
 - Bundle multiple care activities for the resident
 - Identify potential overuse of PPE
 - Consider washable cloth isolation gowns

Framework for Applying EBP

- Must have leadership buy in
- Consider quality improvement project
- Report compliance to QAPI
- Resident and family education
 - Honeybee analogy



Observation tool

Title role of person providing care

Location

Criteria for use of EBP

High-contact activity

Signage present

PPE available

Hand hygiene

FAQs

What are the differences between Enhanced Barrier Precautions and Standard Precautions?

- EBP is a bridge between Standard Precautions and Contact Precautions

What are the differences between Enhanced Barrier Precautions and Contact Precautions?

- Contact Precautions require gloves and gown to enter room

When should we use Contact Precautions instead of EBP for a resident with a MDRO?

- If the resident has excretions/secretions that can't be contained

FAQs

What is the evidence that Enhanced Barrier Precautions are effective at preventing MDRO transmission?

- Studies show EBPs reduce transmission of MDROs
- EBPs are evidenced-based best practice

How did CDC choose the high-contact resident care activities described in the guidance?

- Based on hundreds of observations of care in LTC facilities

Do residents placed on Enhanced Barrier Precautions require placement in a single-person room?

- No, private rooms should be prioritized for acute infections and communicable diseases such as influenza.

FAQs

Why does EBP focus on gown and glove use and not other important infection control measures (e.g., environmental cleaning) for preventing MDRO transmission in nursing homes?

- EBP focuses on glove and gown use. All other infection prevention practices are critical and are performed for all residents.

Can a resident come off EBP if we screen them (infected or colonized) and they test negative for the MDRO?

- No, because colonization is long, and follow-up testing may have false negative results.

Can PPE for EBP be stored in the resident's room?

- No, because of concerns with contamination and compliance with use

Summary

- Infection prevention is everyone's responsibility!
- Protecting residents and staff from infections and harm is a basic standard of care.
- Precautions should be understood and followed by all members of the care team.
- Residents are at increased risk of infection and facilities need to provide a safe environment for all residents
- CMS requires LTC to provide a “home-like environment” and “person-centered care.”
- Leadership involvement is essential!
- Use Transmission-based Precautions for residents with known or suspected infections or evidence of syndromes that represent an increased risk for contact transmission.
- Enhanced Barrier Precautions apply to LTC facilities only

How Can Patient Safety Authority Assist?

- Infection Preventionists
- PSA website
- The Lowdown
- PA-PSRS analytics
- eLearning System





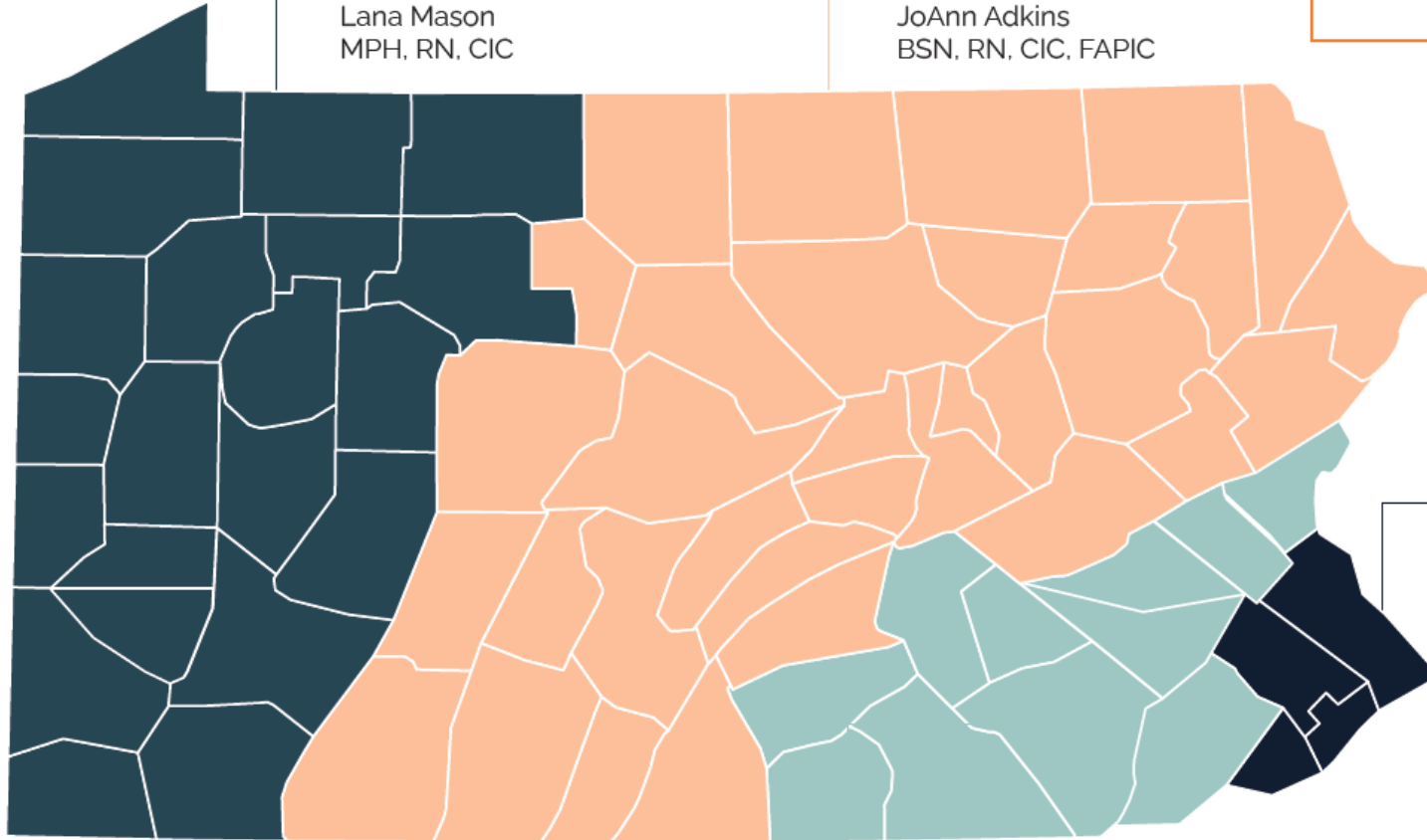
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Resources

- CDC Pre-Implementation Tool—Enhanced Barrier Precautions (EBP)
https://www.cdc.gov/long-term-care-facilities/media/pdfs/pre-implementation-tool-for-enhanced-barrier-precautions-508.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/containment/Pre-Implementation-Tool-for-Enhanced-Barrier-Precautions-508.pdf
- CDC Enhanced Barrier Precautions (EBP) Implementation—Observations Tool
https://www.cdc.gov/long-term-care-facilities/media/pdfs/observations-tool-for-enhanced-barrier-precautions-implementation-508.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/containment/Observations-Tool-for-Enhanced-Barrier-Precautions-Implementation-508.pdf
- CDC Enhanced Barrier Precautions Pocket Guide
https://www.cdc.gov/long-term-care-facilities/media/pdfs/ebp-pocketguide-p.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/containment/EBP-PocketGuide-508.pdf

Resources

- CDC Implementation of Personal Protective Equipment (PPE) Use in Nursing Homes to Prevent Spread of Multidrug-resistant Organisms (MDROs)
https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/ppe.html?CDC_AAref_Val=https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html
- CDC Enhanced Barrier Precautions Letters
 - Residents, families, friends, and volunteers https://www.cdc.gov/long-term-care-facilities/media/pdfs/letter-nursing-home-residents-families-friends-508.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/containment/Letter-Nursing-Home-Residents-Families-Friends-508.pdf
 - Staff https://www.cdc.gov/long-term-care-facilities/media/pdfs/letter-nursing-home-staff-508.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/containment/Letter-Nursing-Home-Staff-508.pdf
 - Leadership https://www.cdc.gov/long-term-care-facilities/media/pdfs/enhanced-barrier-precautions-letter-for-nursing-home-leadership-508.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/containment/Enhanced-Barrier-Precautions-Letter-for-Nursing-Home-Leadership-508.pdf

Resources

- CDC Posters
 - Enhanced Barrier Precautions Sign
https://www.cdc.gov/long-term-care-facilities/media/pdfs/enhanced-barrier-precautions-sign-p.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/containment/enhanced-barrier-precautions-sign-P.pdf
 - How We Keep Our Residents Safe
https://www.cdc.gov/long-term-care-facilities/media/pdfs/ebp-keepresidentssafe-poster-508.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/containment/EBP-KeepResidentsSafe-Poster-508.pdf
 - Enhanced Barrier Precautions (EBP) Steps
https://www.cdc.gov/long-term-care-facilities/media/pdfs/ebp-mdros-poster-p.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/containment/EBP-MDROs-Poster-508.pdf

What questions do you have?

References

- Centers for Disease Control and Prevention. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings [online]. [Cited 2025 February 24]. Available at <https://www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf>
- Centers for Disease Control and Prevention. Implementation of Personal Protective Equipment in Nursing Homes to Prevent Spread of Novel or Targeted Multidrug-resistant Organisms (MDROs). Updated July 2021. [online]. [Cited 2025 February 24]. Available at https://www.cdc.gov/long-term-care-facilities/media/pdfs/ppe-nursing-homes-508.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/containment/PPE-Nursing-Homes-H.pdf

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- Mayoryk, S. et al. Optimizing the implementation of Enhanced Barrier Precautions in community-based nursing homes. American Journal of Infection Control, Volume 53, Issue 1, 126 – 131.
- McKinnell JA, et al. The SHIELD Orange County Project: Multidrug-resistant Organism Prevalence in 21 Nursing Homes and Long-term Acute Care Facilities in Southern California. Clin Infect Dis. 2019 Oct 15;69(9):1566-1573. doi: 10.1093/cid/ciz119. PMID: 30753383; PMCID: PMC7320073.

Thank You!



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