



ENHANCED BARRIER PRECAUTIONS

Healthcare-Associated Infections and Antimicrobial Resistance
Office of Communicable Disease Epidemiology

Agenda

Intro to EBP and Recommendations	Elaina Mills
Implementation tools and FAQs	Elaina Mills
RCS perspective, CMS documentation and FAQs	Kathy Wrynn / Katherine Ander
Questions	Panelists

Panelists



October 11th:

Allison Templeton (DOH)

Elaina Mills (DOH)

Kelly Kauber (DOH)

Kathy Wrynn (DSHS)

Lisa Stubenrauch (Quality Improvement Consulting)

Sabine von Preyss-Friedman (WA-PALTC)



October 25th:

Elaina Mills (DOH)

Katherine Ander (DOH)

Audrey Brezak (DOH)

Marisa D'Angeli (DOH)

Lisa Stubenrauch (Quality Improvement Consulting)

Sabine von Preyss-Friedman (WA-PALTC)

CDC Enhanced Barrier Precautions Update



RECOMMENDATIONS AND GUIDANCE

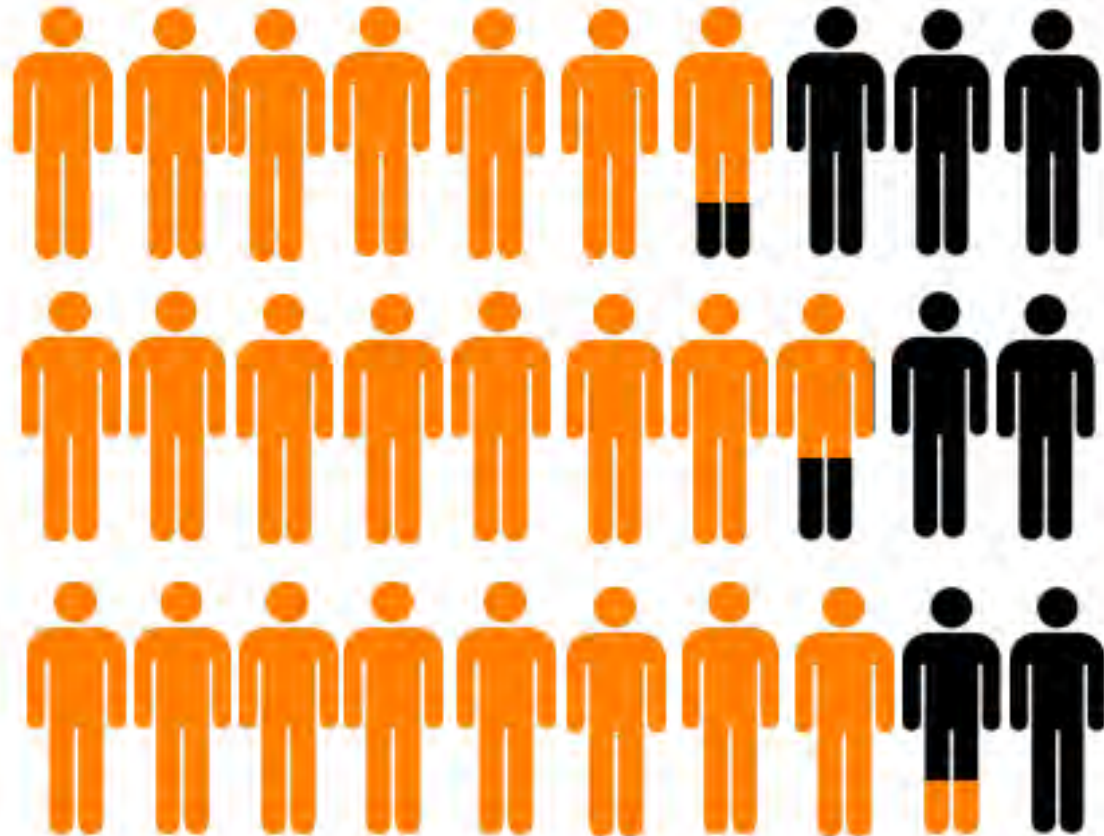
Presenter

Elaina Mills


*Nurse Consultant Advisor/Education and
Guidance Development Program Manager*


Education and Guidance
Development Program

MDRO Prevalence



Facility Type	% Found with MDRO
SNF (n = 14)	58%
vSNF (n = 4)	76%
LTACH (n = 3)	82%

 Known MDRO

 No Known MDRO

(McKinnell, et al., 2019)

Need for Enhanced Barrier Precautions

- Focusing on residents with active infections does not mitigate the continued risk of transmission from residents with MDRO colonization.
- Contact Precautions may present challenges as nursing homes try to balance use of PPE and room restriction to prevent MDRO transmission and resident's quality of life.
- MDRO colonization is asymptomatic and may persist for months to years, propagating transmission of MDROs among residents.
- Enhanced Barrier Precautions (EBP) expand the use of PPE during high contact resident care activities that are most likely to transfer of MDROs to staff hands and clothing.

Indications for EBP

- No longer limited to outbreaks or specific targeted MDROs.
- Indications are expanded to nursing home residents with any of the following:
 - Infection or colonization with an MDRO *when Contact Precautions do not otherwise apply.*
 - Presence of wound or Indwelling medical devices, regardless of MDRO colonization status.



ENHANCED BARRIER PRECAUTIONS



EVERYONE MUST:



Clean their hands, including before entering and when leaving the room.

PROVIDERS AND STAFF MUST ALSO:



Wear gloves and a gown for the following High-Contact Resident Care Activities.

- Dressing
- Bathing/Showering
- Transferring
- Changing Linens
- Providing Hygiene
- Changing briefs or assisting with toileting
- Device care or use:
 - central line, urinary catheter, feeding tube, tracheostomy
- Wound Care: any skin opening requiring a dressing



Do not wear the same gown and gloves for the care of more than one person.



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Centers for Disease Control and Prevention

Enhanced Barrier Precautions

- Use of gown and gloves during High contact resident care activities
- No private room required
- Change PPE before caring for another resident
- Residents can participate in group activities
- Intended to be used for resident's entire length of stay.

CDC Enhanced Barrier Precautions Update

IMPLEMENTATION AND FAQ

Implementation

- Use Quality Improvement processes, such as a PDSA cycle.
- Define criteria for residents that require EBP.
- Define activities that require EBP for these residents.
- Identify staff that complete these activities for training.
- Start small- a wing, hallway, unit.

The PDSA Cycle for Learning and Improvement



Criteria for EBP application

All residents in a skilled nursing facility or nursing home with any of the following:


- Infection or colonization with an MDRO *when Contact Precautions when Contact precautions do not apply.*
- Wounds, *regardless of MDRO colonization status.*
- Indwelling medical devices, *regardless of MDRO colonization status.*

Enhanced Barrier Precautions

Recommended in	Not Currently Recommended in
Nursing Homes (NHs)	Acute Care Hospitals
Skilled Nursing Facilities (SNFs)	Long-Term Acute Care Hospitals
	Assisted Living Facilities
	Residential Care Facilities
	Group Homes

[PowerPoint Presentation \(virginia.gov\)](#)

Examples of MDROs



METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA)

80,461 SEVERE MRSA INFECTIONS PER YEAR

11,285 DEATHS FROM MRSA PER YEAR

THREAT LEVEL: SERIOUS (5/5)

MRSA is a methicillin-resistant staphylococcal and catalase-positive bacterium that persists even when not growing.

STAPHYLOCOCCI ARE A LEADING CAUSE OF **HEALTHCARE-ASSOCIATED INFECTIONS**



CARBAPENEM-RESISTANT ENTEROBACTERIACEAE

9,000 DRUG-RESISTANT INFECTIONS PER YEAR

600 DEATHS

7,900 CARBAPENEM-RESISTANT ENTEROBACTERIACEAE

1,400 CARBAPENEM-RESISTANT E. COLI

THREAT LEVEL: URGENT (4/5)

This bacteria is an immediate public health threat that requires urgent and aggressive action.

CRE HAVE BECOME RESISTANT TO ALL OR NEARLY ALL AVAILABLE ANTIBIOTICS



EXTENDED SPECTRUM β -LACTAMASE (ESBL) PRODUCING ENTEROBACTERIACEAE

26,000 DRUG-RESISTANT INFECTIONS

1,700 DEATHS

140,000 ENTEROBACTERIACEAE INFECTIONS PER YEAR

\$40,000 IN EXCESS MEDICAL COSTS PER YEAR FOR EACH INFECTION

THREAT LEVEL: SERIOUS (5/5)

ESBLs are a serious concern and require prompt and sustained action to ensure the problem does not grow.



MULTIDRUG-RESISTANT ACINETOBACTER

7,300 MULTIDRUG-RESISTANT ACINETOBACTER INFECTIONS

500 DEATHS FROM MULTIDRUG-RESISTANT ACINETOBACTER INFECTIONS

12,000 ACINETOBACTER INFECTIONS PER YEAR

THREAT LEVEL: SERIOUS (5/5)

This bacteria is a serious concern and requires prompt and sustained action to ensure the problem does not grow.

AT LEAST THREE DIFFERENT CLASSES OF ANTIBIOTICS NO LONGER CURE RESISTANT ACINETOBACTER INFECTIONS



VANCOMYCIN-RESISTANT ENTEROCOCCUS (VRE)

20,000 DRUG-RESISTANT ENTEROCOCCUS INFECTIONS

1,300 DEATHS FROM DRUG-RESISTANT ENTEROCOCCUS INFECTIONS

66,000 ENTEROCOCCUS INFECTIONS PER YEAR

THREAT LEVEL: SERIOUS (5/5)

Some Enterococcus strains are resistant to vancomycin leaving few or no treatment options.

THIS BACTERIA IS A SERIOUS CONCERN AND REQUIRES PROMPT AND SUSTAINED ACTION TO ENSURE THE PROBLEM DOES NOT GROW.



MULTIDRUG-RESISTANT PSEUDOMONAS AERUGINOSA

6,700 MULTIDRUG-RESISTANT PSEUDOMONAS INFECTIONS

440 DEATHS

51,000 PSEUDOMONAS INFECTIONS PER YEAR

THREAT LEVEL: SERIOUS (5/5)

This bacteria is a serious concern and requires prompt and sustained action to ensure the problem does not grow.

Indwelling Medical Devices

- An indwelling medical device provides a direct pathway for pathogens in the environment to enter the body and cause infections.
 - Examples include indwelling urinary catheters, feeding tubes, tracheostomy/ventilator tubes, central vascular lines, and hemodialysis catheters.
- Devices that are fully embedded in the body, without components that communicate with the outside, would *not* be considered an indication for Enhanced Barrier Precautions.
 - Examples include pacemakers, artificial joints, mesh, plates, or pins.

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

Strategies to Support Process

- Post clear signage outside of resident's room to indicate EBP precautions.
- PPE available immediately outside of resident's room entry.
- Alcohol based hand sanitizer available inside and outside room.
- Trash receptacle inside room, near exit.
- Periodic monitoring of adherence to determine if additional training or education is needed.
- Provide education to residents and visitors.



STOP **ENHANCED BARRIER PRECAUTIONS** **STOP**
EVERYONE MUST:

 Clean their hands, including before entering and when leaving the room.

PROVIDERS AND STAFF MUST ALSO:

 **Wear gloves and a gown for the following High-Contact Resident Care Activities.**

 **Do not wear the same gown and gloves for the care of more than one person.**

Dressing
Bathing/Showering
Transferring
Changing Linens
Providing Hygiene
Changing briefs or assisting with toileting
Device care or use:
central line, urinary catheter, feeding tube, tracheostomy
Wound Care: any skin opening requiring a dressing

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FAQ: Are gowns and gloves recommended for EBP when transferring from a wheelchair to chair in the day room or dining room?

- Gown and gloves would not be recommended when performing transfers in common areas, where contact is anticipated to be shorter in duration.
- EBP should be used for transfers outside of the patient's private room in situations where close physical contact is anticipated to be longer in duration such: transfers or assisting during bathing in a common shower room and when working with residents in the therapy gym.

FAQ: Do residents placed on EBP require placement in a single-person room?

- No. Single-person rooms should be priorities for residents in transmission-based precautions that need a private room.
- Residents on EBP may share rooms with other residents.

FAQ: The guidance on inclusion of resident with wounds excludes skin tear and abrasions, but I am still confused about the definition of a resident with a wound and how the assessment of a wound as “chronic” plays into the assessment of need for EBP. Can you help me understand the inclusion of residents with wounds and which type of wounds we are supposed to include in EBP?

- The CDC Frequently Asked Questions (FAQs) about [*Frequently Asked Questions \(FAQs\) about Enhanced Barrier Precautions in Nursing Homes*](#) states wound care is included as a high-contact resident care activity and is generally defined as the care of any skin opening requiring a dressing. However, the intent of Enhanced Barrier Precautions is to focus on residents with a higher risk of acquiring an MDRO over a prolonged period of time. This generally includes residents with chronic wounds, and not those with only shorter-lasting wounds, such as skin breaks or skin tears covered with a Band-aid or similar dressing.
- Examples of chronic wounds include, but are not limited to, pressure ulcers, diabetic foot ulcers, unhealed surgical wounds, and chronic venous stasis ulcers.



How to Be Successful

[Implementation of Personal Protective Equipment \(PPE\) in Nursing Homes to Prevent Spread of Novel or Targeted Multidrug-resistant Organisms \(MDROs\) | HAI | CDC](#)

Resources

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

Frequently Asked Questions (FAQs) about Enhanced Barrier Precautions in Nursing Homes
<https://www.cdc.gov/hai/containment/faqs.html>

Considerations for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities
<https://www.cdc.gov/hicpac/workgroup/EnhancedBarrierPrecautions.html?msclkid=39038417aed311ec8c868e1e03c50297>

Enhanced Barrier Precautions in Skilled Nursing Facilities
https://www.vdh.virginia.gov/content/uploads/sites/174/2022/04/Mid-Atlantic-EBP-Webinar_cleanversion_3.31.22_updated.pdf

Enhanced Barrier Precautions Letter to Nursing Home Residents, Families, Friends, and Volunteers
<https://www.cdc.gov/hai/pdfs/containment/Letter-Nursing-Home-Residents-Families-Friends.pdf>

Enhanced Barrier Precautions Letter to Nursing Home Staff <https://www.cdc.gov/hai/pdfs/containment/Letter-Nursing-Home-Staff.pdf>



REGULATING ENHANCED BARRIER PRECAUTIONS (EBP) IN NURSING HOMES (NH)



Department of Social and Health Services (DSHS)
Aging and Long-Term Support Administration (ALSA)
Residential Care Services (RCS)

Presenters

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Infection Control Prevention and Projects Specialist

*Residential Care Service / Aging and Long-Term
Support Administration*

WA DSHS

Katherine Ander RN, MN

Infection Control Prevention and Projects Specialist

*Residential Care Service / Aging and Long-
Term Support Administration*

WA DSHS

F880 Infection Control

§483.80(a)(2) Written standards, policies, and procedures for the program, which must include, but are not limited to:

- (i) A system of surveillance designed to identify possible communicable diseases or infections before they can spread to other persons in the facility;
- (ii) When and to whom possible incidents of communicable disease or infections should be reported;
- (iii) Standard and transmission-based precautions to be followed to prevent spread of infections;

F880 Infection Control

(iv) When and how isolation should be used for a resident; including but not limited to:

(A) The type and duration of the isolation, depending upon the infectious agent or organism involved, and

(B) A requirement that the isolation should be the least restrictive possible for the resident under the circumstances.

INTENT §483.80(a)(1), (a)(2), (a)(4), (e) and (f)

The intent of this regulation is to ensure that the facility:

- Develops and implements an ongoing infection prevention and control program (IPCP) to prevent, recognize, and control the onset and spread of infection to the extent possible and reviews and updates the IPCP annually and as necessary. *This would include revision of the IPCP as national standards change;*

What Facilities Should Do

Update and Implement Policies & Systems to Include Multi Drug Resistant Organism (MDRO) Surveillance, Reporting and EBP

- EBP are indicated for residents with:
 - **Infection or colonization with an MDRO** *when Contact Precautions do not otherwise apply*
 - **Wounds and/or indwelling medical devices**
- EBP is not limited to outbreaks or specific MDROs

What Facilities Should Do

Review the [Frequently Asked Questions \(FAQs\)](#) about Enhanced Barrier Precautions in Nursing Homes

Know which activities are “high-contact” or included under “providing hygiene”

- Providing hygiene refers to practices such as brushing teeth, combing hair, and shaving
- Isolated combing of a resident’s hair that is not otherwise bundled with other high-contact resident care activities would not generally necessitate use of a gown and gloves

What Facilities Should Do

Clarify in your policy when to use EBP related to transfers and shared activities in dining or day rooms or physical therapy gyms

Gowns & Gloves	Yes	No
Performing transfers in common areas such as dining or activity rooms, where contact is anticipated to be shorter in duration		X
Performing transfers or assisting during bathing in a shared/common shower room	X	
Working with residents in the therapy gym, specifically when anticipating close physical contact while assisting with transfers and mobility	X	

What Facilities Should Do

Clarify in your policy when to use EBP for “care and use” of indwelling medical devices

- Define “indwelling medical device”
- Gown and gloves for any dressing changes or use of indwelling medical device?
- Gloves alone if limited only limited physical contact between healthcare worker and resident (e.g., passing meds through a feeding tube)?

What Facilities Should Do

Educate Staff and Residents to EBP

- [Letter to Residents, Families, Friends & Volunteers](#) Keeping Residents Safe – Use of Enhanced Barrier Precautions
- [Dear Valued Staff](#) Help Keep Our Residents Safe – Enhanced Barrier Precautions in Nursing Homes

Support New Behaviors

- Signage, Training, Readily Available PPE, Clear Policies
- Open Communication & Reinforcement

RCS Role in Regulating EBP in NH

Centers for Medicare & Medicaid Services

- Introduced EBP in 2019
- No Directive to Cite EBP currently
- Anticipate EBP will be reviewed and cited during survey in the future

Best Advice

- Implement EBP to reduce transmission of MDRO in your facility.
- Align facility policies with CMS Guidance

Knowledge Check – True/False

1. Many nursing home residents are unknowingly colonized with an MDRO, especially residents with risk factors like indwelling medical devices or wounds

True

2. Healthcare personnel can spread MDROs through contaminated hands and clothing

True

3. Facilities do not have to implement EBP until CMS directs Surveyors to start citing

False, EBP is a CDC standard

FAQ: When are we supposed to implement EBP?

- EBP should be implemented now. The information has been published and available since 2019.
- EBP are intended to be used for resident's entire length of stay

FAQ: Is there additional funding associated with EBP and the increased need for staffing hours and overwhelming amount of PPE and PPE disposal?

- There is not funding associated with EBP at this time.
- CDC Cost Considerations state: “Implementation of routine EBP would incur costs including PPE (gowns/gloves), training, staff time to don and doff PPE, and signage materials. Potential savings would include avoidance of infections and hospitalizations.”

FAQ: Any additional guidance on how to implement it and how facility will be surveyed in relation to EBP would be helpful.

- This EBP training gives some great information about how to implement EBP.
- CDC provides some great resources:
 - [*Consideration for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities*](#) including a Framework for Applying Enhanced Barrier Precautions in Skilled Nursing Facilities
 - [*Frequently Asked Questions \(FAQs\) about Enhanced Barrier Precautions in Nursing Homes*](#)

FAQ: What training have the surveyors had about EBP?

- RCS staff have been given basic information about EBP with links to CDC FAQ and website as well as directions that RCS is not regulating the EBP standard until directed to do so by CMS.
- RCS staff are encouraged to attend presentations about EBP.

FAQ: What happens if we don't implement EBP?

- Facilities should implement EBP to reduce transmission of MDRO in your facility. Failure to do so contributes to the infection burden on your facility staff and residents.

References

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

Frequently Asked Questions (FAQs) about Enhanced Barrier Precautions in Nursing Homes <https://www.cdc.gov/hai/containment/faqs.html>

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