

**Centers for Disease Control and Prevention**

National Center for Emerging and Zoonotic Infectious Diseases



# Implementation of Enhanced Barrier Precautions in Nursing Homes to Prevent Spread of Multidrug-resistant Organisms

# Definitions of Common Terms and Abbreviations

- Multidrug-resistant Organism (MDRO): bacteria or fungi resistant to multiple antimicrobials
- Colonization: germ is found on or in the body but is not causing infection

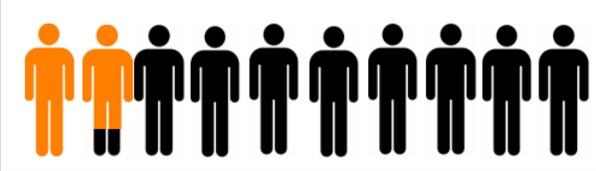
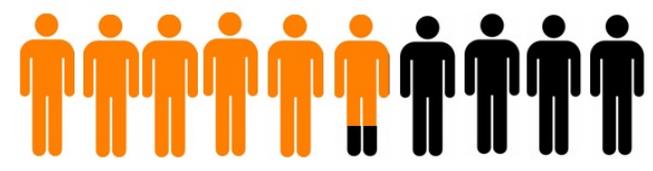
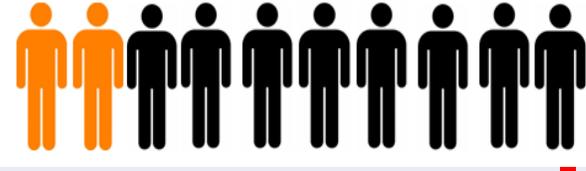
# Presentation Outline

1. Impact and burden of MDROs in nursing homes
2. Need for Enhanced Barrier Precautions (EBP)
3. Indications for and use of EBP
4. How to be successful

# MDROs Have Significant Impact in Nursing Homes

- Many nursing home residents are unknowingly colonized with an MDRO, especially residents with risk factors like indwelling medical devices or wounds
- Residents who have an MDRO can develop serious infections, remain colonized for long time periods, and spread MDROs to others
- Healthcare personnel can spread MDROs through contaminated hands and clothing

# The Large Burden of MDROs in Nursing Homes

Facility Type	Documented MDRO	Actual MDRO
Nursing Homes (n = 14)	17% 	58% 
Ventilator-Capable Nursing Homes (n = 4)	20% 	76% 



Known MDRO



No Known MDRO

# Need for Enhanced Barrier Precautions (EBP)

- Historically, interventions in nursing homes have focused only on residents who are actively infected with an MDRO
- Need for a broader approach to reduce the spread of MDROs without isolating residents for long periods of time
- Recent studies have indicated the use of EBP can effectively reduce the spread of MDROs

# Indications for Enhanced Barrier Precautions

- EBP are indicated for nursing home residents with any of the following:
  - 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

# Enhanced Barrier Precautions

- Use of gown and gloves during high-contact resident care activities
- No private room required
- Residents can participate in group activities
- Intended to be used for resident's entire length of stay



**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.

 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.**

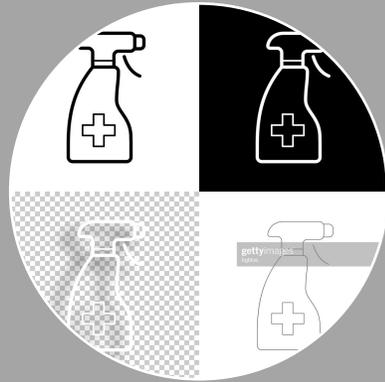
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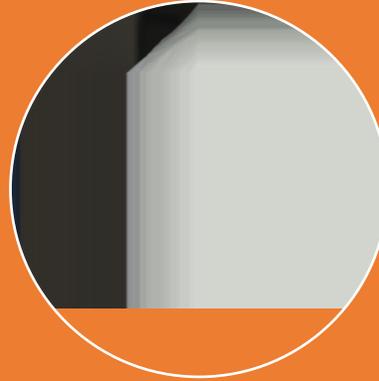
# How to Be Successful



Hand Hygiene



Environmental  
Cleaning and  
Disinfection



Enhanced  
Barrier  
Precautions



Auditing



Communication



# Resources for Enhanced Barrier Precautions

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 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>

# Thank you.

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



**Optional Q&A**

# Question #1: Which residents should be placed into Enhanced Barrier Precautions?

- EBP are indicated for nursing home residents with any of the following:
  - **Infection or colonization with an MDRO** *when Contact Precautions do not otherwise apply*
  - **Wounds and/or indwelling medical devices**

## Question #2: Which activities are included under "providing hygiene"?

- Providing hygiene refers to practices such as brushing teeth, combing hair, and shaving
- Many of the high-contact resident care activities listed in the guidance are commonly bundled as part of morning and evening care for the resident rather than occurring as multiple isolated interactions with the resident throughout the day
- 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

## Question #3: The guidance advises using EBP for the “care and use” of indwelling medical devices. What does that mean?

- The safest practice would be to wear a gown and gloves for any care (e.g., dressing changes) or use (e.g., injecting or infusing medications or tube feeds) of the indwelling medical device
- It may be acceptable to use gloves alone for some uses of a medical device that involves only limited physical contact between healthcare worker and resident (e.g., passing meds through a feeding tube)
- Facilities should define these limited contact activities in their policies and procedures and educate healthcare personnel to ensure consistent application of Enhanced Barrier Precautions

## Question #4: What is the definition of “indwelling medical device”?

- An indwelling medical device provides a direct pathway for pathogens in the environment to enter the body and cause infection
- Examples include, but are not limited to, central vascular lines (including hemodialysis catheters), indwelling urinary catheters, feeding tubes, and tracheostomy tubes
- Devices that are fully embedded in the body, without components that communicate with the outside, such as pacemakers, would not be considered an indication for Enhanced Barrier Precautions

## Question #5: Are gowns and gloves recommended for EBP when transferring a resident from a wheelchair to chair in the dayroom or dining room?

- In general, gowns and gloves would not be recommended when performing transfers in common areas such as dining or activity rooms, where contact is anticipated to be shorter in duration
- Outside the resident's rooms, EBP should be followed when performing transfers or assisting during bathing in a shared/common shower room and when working with residents in the therapy gym, specifically when anticipating close physical contact while assisting with transfers and mobility