



Enhanced Barrier Precautions

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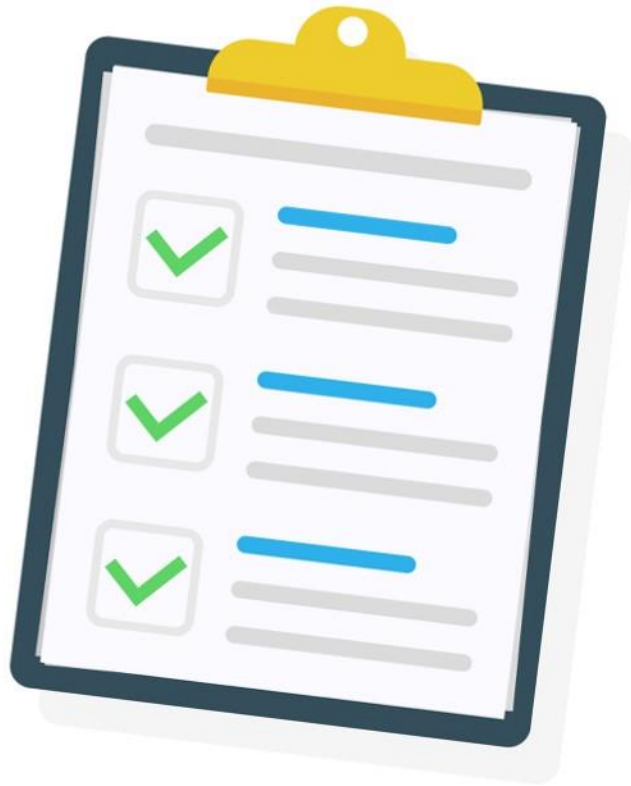


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Agenda



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

Pre-assessment

Have you heard of Enhanced Barrier Precautions?

1. Yes
2. No

Pre-assessment

If you have heard of EBP, how confident do you feel that you could implement EBP, if needed?

1. Very unconfident
2. Unconfident
3. Neither confident nor unconfident
4. Confident
5. Very confident

Pre-assessment

Are you aware of the new updated guidance on EBP?

1. Yes
2. No

Pre-assessment

With the new updated guidance on EBP, how confident do you feel that you could implement EBP into your daily practice?

1. Very unconfident
2. Unconfident
3. Neither confident nor unconfident
4. Confident
5. Very confident

MDROs have a 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 periods of time, and spread MDROs to others
- Healthcare personnel can spread MDROs through contaminated hands, shared medical equipment, etc.

Epidemiologically important MDROs

METHICILLIN-RESISTANT *STAPHYLOCOCCUS AUREUS*

THREAT LEVEL **SERIOUS**



323,700
Estimated cases
in hospitalized
patients in 2017




10,600
Estimated
deaths in 2017



\$1.7B
Estimated attributable
healthcare costs in 2017

EXTENDED-SPECTRUM BETA-LACTAMASE (ESBL) PRODUCING *ENTEROBACTERIACEAE*

THREAT LEVEL **SERIOUS**



197,400
Estimated cases
in hospitalized
patients in 2017



9,100
Estimated
deaths in 2017



\$1.2B
Estimated attributable
healthcare costs in 2017

VANCOMYCIN-RESISTANT *ENTEROCOCCI* (VRE)

THREAT LEVEL **SERIOUS**



54,500
Estimated cases
in hospitalized
patients in 2017

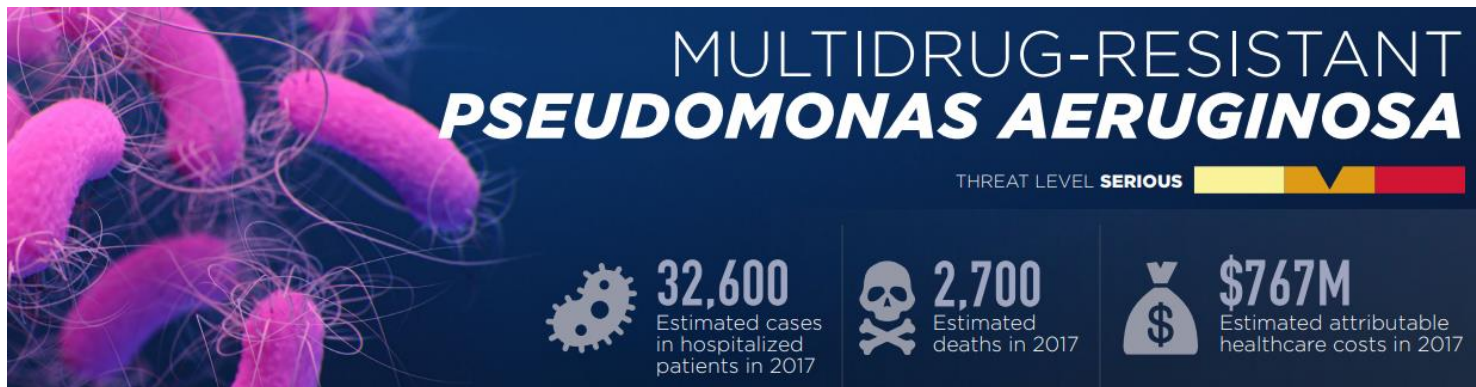
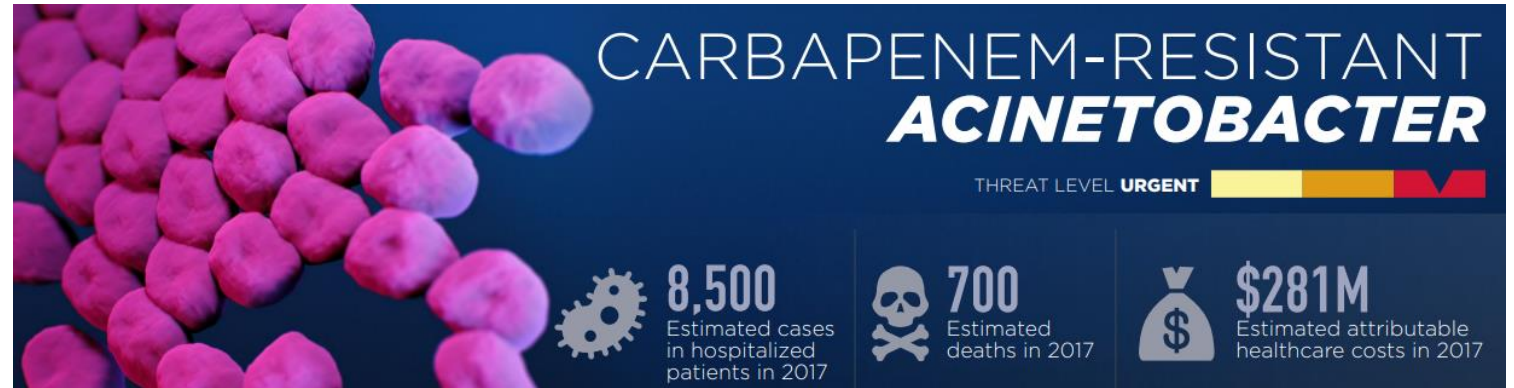


5,400
Estimated
deaths in 2017



\$539M
Estimated attributable
healthcare costs in 2017

Epidemiologically important MDROs



Epidemiologically important MDROs

DRUG-RESISTANT **CANDIDA AURIS**

THREAT LEVEL **URGENT**



323

Clinical cases
in 2018



90% Isolates resistant to at
least **one** antifungal

30% Isolates resistant to at
least **two** antifungals

Candida auris (*C. auris*) is an emerging multidrug-resistant yeast (a type of fungus). It can cause severe infections and spreads easily between hospitalized patients and nursing home residents.




MDRO Prevalence in Nursing Homes¹



Known MDRO



No Known MDRO

Facility Type	Documented MDRO
Nursing Homes (n = 14)	17% 
Ventilator-Capable Nursing Homes (n = 4)	20% 
Long-term Acute Care Hospitals (n=3)	50% 







MDRO Prevalence in Nursing Homes¹



Known MDRO



No Known MDRO

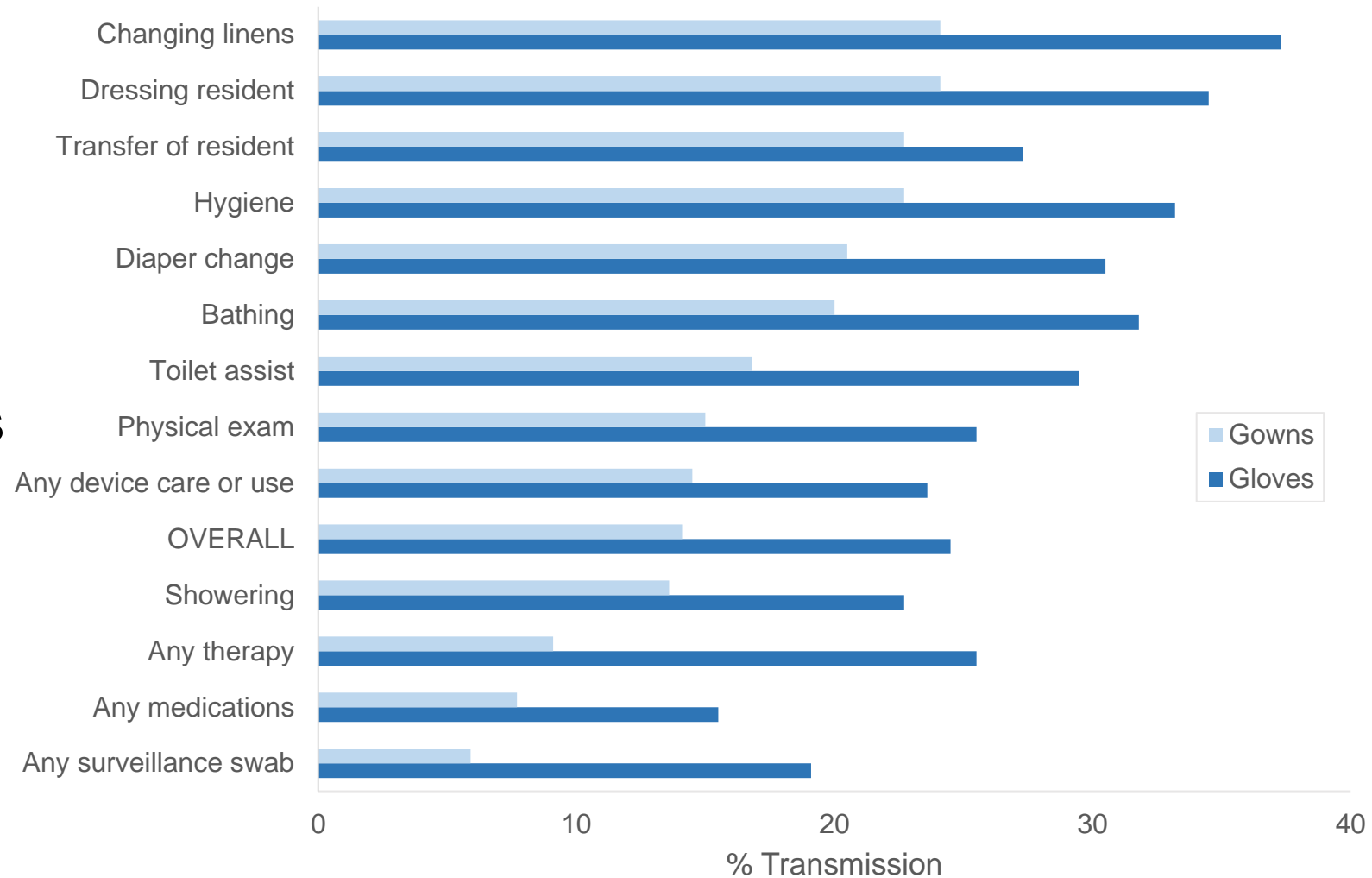
Facility Type	Documented MDRO	Found with MDRO
Nursing Homes (n = 14)	17% 	58% 
Ventilator-Capable Nursing Homes (n = 4)	20% 	76% 
Long-term Acute Care Hospitals (n=3)	50% 	82% 

Contamination of caregiver gloves and gowns during common care activities²

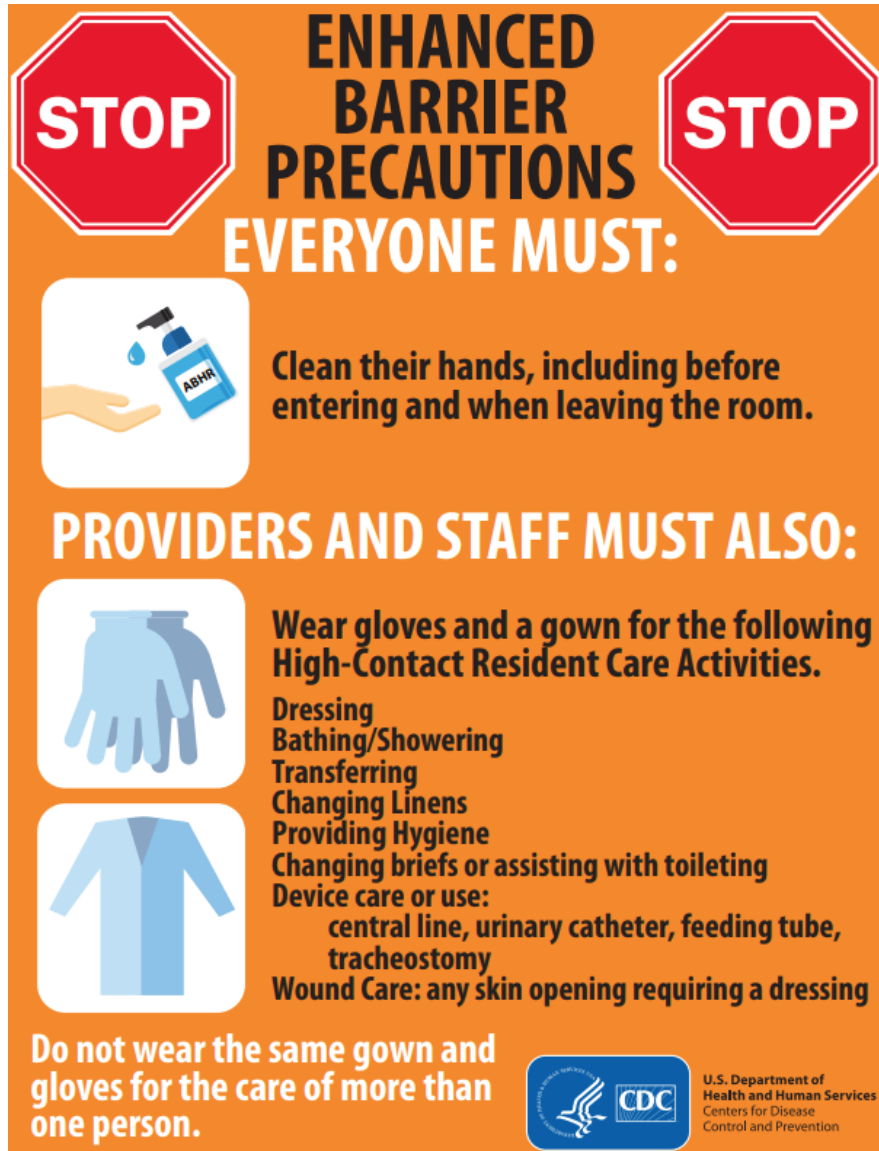
- n = 401 LTCF residents from 13 different facilities in 2 different states
- Type and duration of healthcare provider's interaction with the resident was recorded, and healthcare provider's gown and gloves were swabbed after completing the care activity/activities
- 954 interactions recorded/sampled
- 14% of gowns contaminated with MRSA after providing care to resident colonized with MRSA
- 24% of gloves contaminated with MRSA after providing care to resident colonized with MRSA

Contamination of caregiver gloves and gowns during common care activities²

- High risk activities for transmission included dressing resident, transferring of resident, providing hygiene, changing linens, and changing diapers
- Low risk activities for transmission included giving medications and performing glucose monitoring




What is Enhanced Barrier Precautions?




The infographic is set against an orange background. At the top, two red octagonal 'STOP' signs flank the title 'ENHANCED BARRIER PRECAUTIONS' in large, bold, black letters. Below the title, the text 'EVERYONE MUST:' is written in white. The first instruction is accompanied by an icon of a hand being washed with a blue bottle of hand sanitizer labeled 'ABHR'. The second instruction is accompanied by icons of a pair of blue gloves and a blue gown. At the bottom left, there is a warning in white text. At the bottom right, the CDC logo and name are displayed.


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.

 U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

- Use of gown and gloves during high-contact care activities for high-risk residents to disrupt MDRO spread
- Does not require a private room, and residents are not restricted to their room
- Intended to be used for the entire length of resident's stay in the facility

Indications for use of EBP

Recommended for residents with	Not recommended
Infection or colonization with an MDRO <i>*when Contact Precautions do not apply</i>	Resident with draining wounds
Wounds <i>*regardless of MDRO colonization status</i>	Resident with acute diarrhea
Indwelling medical devices <i>*regardless of MDRO colonization status</i>	Resident with sites of secretions or excretions that are unable to be covered or contained
	On units or in facilities where ongoing transmission is documented or suspected



Discontinuation of EBP may be appropriate for residents placed on EBP solely because of the presence of a wound or indwelling medical device when the wound heals or the device is removed.

Implementation of EBP

- Planning
- Training and educating staff
- Education for residents, families, and visitors
- Communication
- Ordering/stocking precautions signs
- Supply of PPE and isolation carts
- Location sites for isolation carts, ABHS dispensers, and disinfectant wipes
- Implementation as a standing item in QAPI
- Identifying residents with qualifying characteristics for placement on EBP
- Placement of residents on EBP or Contact Precautions
- Documentation – line list, care plan

Training and educating staff

THINK

- What residents am I assigned to?
- Are any residents on Transmission-Based Precautions?
- How do I organize my time?
- Which residents should I care for first?

PLAN

- What supplies do I need to care for the resident?
- What PPE do I need to wear and when?
- How many glove changes do I anticipate?
- Are hand hygiene supplies readily available?
- In what order should I perform resident care tasks?

DO

- Bathing, dressing, transferring residents from beds to chairs and back, and wound/device care
- REMEMBER: Clean versus dirty – you'll need to change gloves and perform hand hygiene several times

Example of implementation of EBP

100 Hall		200 Hall	
1		8	
2A	2B	9A	9B
3A	3B	10A	10B
4A	4B	11A	11B
5A	5B	12A	12B
6A	6B	13A	13B
7A	7B	14A	14B

Indications for Enhanced Barrier Precautions			
Indwelling foley catheter	Trach	Wound	Known MDRO
2A	1	2B	11A
4A	5B	3A	
14B		7A	
		12B	

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5A	5B	12A	12B
6A	6B	13A	13B
7A	7B	14A	14B

Example of education for residents, families, and visitors

A message from: _____

August 3, 2022

Dear Residents, Families, Friends, and Volunteers:

You may have noticed new signs on some doors that say “Enhanced Barrier Precautions” and staff wearing gowns and gloves more often. We’re doing this based on new recommendations from the Centers for Disease Control and Prevention to protect our residents and staff from germs that can cause serious infections and are hard to treat. You may have heard these germs called multidrug-resistant organisms or MDROs in the news.

Studies have shown that more than 50% of nursing home residents have these germs on or in their body, especially in places where the skin is broken, such as wounds or insertion sites of medical devices like feeding tubes. Most of the time people never know they are carrying these germs but under certain conditions they can enter the body and cause serious infections.

Fortunately, there are many things we can do to keep these germs from spreading, but we need your help! Two important practices are:

- 1. Cleaning our hands.** Alcohol-based hand sanitizer can kill these germs and keep us from spreading them with our hands. This is why we remind you and your visitors to frequently clean your hands.
- 2. Using gown and gloves.** Since we can’t wash our clothes between caring for residents, gowns and gloves help keep these germs from getting on our clothes and spreading to others when we are having close contact with residents. This is why you might see us wearing a gown and gloves when we are performing transfers or other activities involving a lot of contact with a resident. Just because we are wearing a gown and gloves doesn’t mean that a resident is carrying one of these germs. We also wear them to protect residents who might be more vulnerable to developing a serious infection if exposed to these germs. We will also wear them if we expect a care activity to be messy, like if we are changing a dressing on a wound.

To support these practices, you will see more alcohol-based hand sanitizer dispensers, carts to hold clean gowns and gloves, and trash cans so we can change gowns and gloves between residents. You will also see more signs to help remind staff when they should be wearing gowns and gloves.

We are always happy to answer any questions you might have about actions we are taking to protect our residents and staff and appreciate your support!

Please contact us with additional questions at: _____

Sincerely,

How to be successful with implementing EBP



Hand Hygiene



Environmental
Cleaning and
Disinfection



Enhanced
Barrier
Precautions



Auditing



Communication

Frequently asked questions

1. 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

Frequently asked questions

2. **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

Frequently asked questions

3. 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

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>

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>

Practice scenarios – Example 1

Resident of a nursing home with acute diarrhea for 1 week. He has a tracheostomy and colonization with vancomycin-resistant enterococci (VRE). Acute diarrhea resolves and does not recur.

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- What type of precautions, if any would you recommend for the resident while he has acute diarrhea?
 1. Standard Precautions
 2. Contact Precautions
 3. Enhanced Barrier Precautions
 4. No Precautions

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- How long should the resident be on precautions, if any?
 1. Remove from precautions once tracheostomy is removed
 2. On precautions until testing negative for MDRO(s)
 3. On precautions for 6 months
 4. On precautions for the duration of stay at facility

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Practice scenarios – Example 2

Resident of a nursing home has had an indwelling urinary catheter to promote wound healing. She has a history of being colonized with carbapenem-resistant *Escherichia coli* (CRE). The wound is now healed, and the indwelling urinary catheter has been removed. The resident has no other wounds or indwelling medical devices.

Practice scenarios – Example 2

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Resident of a nursing home is on Enhanced Barrier Precautions for a targeted MDRO.

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- Should the resident be placed in a single-person room?
 1. Yes
 2. No
 3. Unsure

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Post-assessment

With what you've learned today, how confident are you now in regard to implementing Enhanced Barrier Precautions?

1. Very unconfident
2. Unconfident
3. Neither confident nor unconfident
4. Confident
5. Very confident

Contact information

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877.427.7317 Phone

Healthcare-Associated Infections & Antimicrobial Resistance Program



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Thank you! Questions?

