# **Enhanced Barrier Precautions for Skilled Nursing Facilities** *with Additional Considerations for California SNFs*

SNF IP Course, 2024

Skilled Nursing Facility Infection Preventionist Office Hours

Healthcare-Associated Infections Program

Center for Health Care Quality

California Department of Public Health



### **Objectives**

- Define the who, what, when, where, and how of Enhanced Barrier Precautions (EBP) in skilled nursing facilities (SNFs)
- Describe the moments of EBP
- Review how implementing EBP can prevent multidrug-resistant organism (MDRO) transmission in SNFs
- Discuss the steps for implementing EBP in SNFs
- Describe how to monitor adherence to EBP practices



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

Ref: QSO-24-08-NH

**DATE:** March 20, 2024

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.



# What about CDPH's Enhanced Standard Precautions?

- Because California nursing homes are now required per <u>CMS QSO-24-08-NH</u> to implement CDC's EBP, <u>CDPH has "retired" our Enhanced Standard Precautions</u> (ESP) guidance.
- CDPH's ESP was based on the same core principles as EBP, so SNFs that previously implemented CDPH's ESP should be well-positioned to be in compliance with the CMS requirements for EBP implementation.
- California SNFs should **refer to CDC's EBP guidance and FAQs**: (note updated URLs)
  - https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/ppe.html
  - https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/faqs.html



# What is EBP?

- EBP is an infection prevention strategy designed to reduce multidrugresistant organism (MDRO) transmission in SNFs through targeted gown and glove use during high-contact resident care activities.
- EBP are indicated for residents with any of the following:
  - Infection or colonization with a CDC-targeted MDRO when Contact Precautions do not otherwise apply; or
  - Wounds and/or indwelling medical devices even if resident is not known to be infected or colonized with a MDRO.



# Why does EBP apply to all residents with wounds or indwelling medical devices, regardless of MDRO status?

- More than 50% of nursing home residents colonized with an MDRO, and these residents can serve as sources of MDRO transmission and outbreaks within the facility.
  - Residents' MDRO colonization status is frequently unknown to the facility
- Indwelling medical devices and wounds are risk factors for MDRO colonization.
- Use of EBP for residents with wounds or indwelling medical devices is intended to
  protect these high-risk residents both from acquisition and from serving as a
  source of transmission if they have already become colonized.



### **Unrecognized MDRO Carriage in Nursing Homes**

Facilities with skilled units (n=14)



58% MDRO Documented
carriage MDRO: 17%

Facilities with ventilator units (n=4)



76% MDRO \_\_\_\_\_ carriage

Documented MDRO: 20%



### Substantial Increases in MDROs in U.S. During and After the Pandemic

	Thurst	Change in Rates or Number of Infections***				
	Threat	2020 vs. 2019	2021 vs. 2020	2022 vs. 2021	2022 vs. 2019	
SERIOUS* URGENT*	Hospital-onset CRE	Increase	Increase	Stable	Increase	
	Hospital-onset Carbapenem- resistant <i>Acinetobacter</i>	Stable	Stable	Stable	Increase"	
	Clinical Cases of C. auris	Increase	Increase	Increase	Increase	
	Hospital-onset MRSA	Increase	Stable	Decrease	Stable	
	Hospital-onset VRE	Increase	Increase	Stable	Increase	
	Hospital-onset ESBL- producing Enterobacterales	Increase	Stable	Stable	Increase	
	Hospital-onset MDR Pseudomonas aeruginosa	Increase	Increase	Stable	Increase	

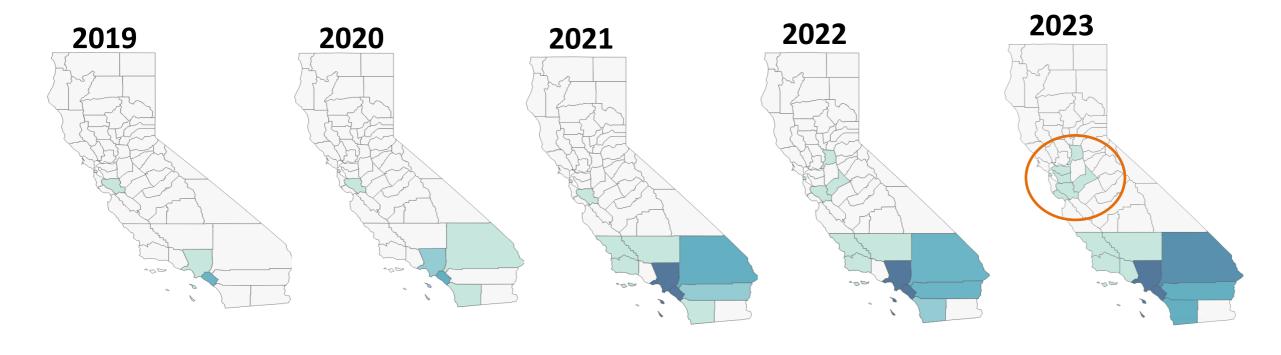


### **MDROs in California**

- Epidemiology of MDROs in California has changed considerably due to the COVID-19 pandemic
  - MDRO prevalence has increased
  - Large, sustained, regional outbreaks of previously novel or rare MDRO
- Continued challenges with SNF hesitant to accept transfers of residents known to be MDRO colonized



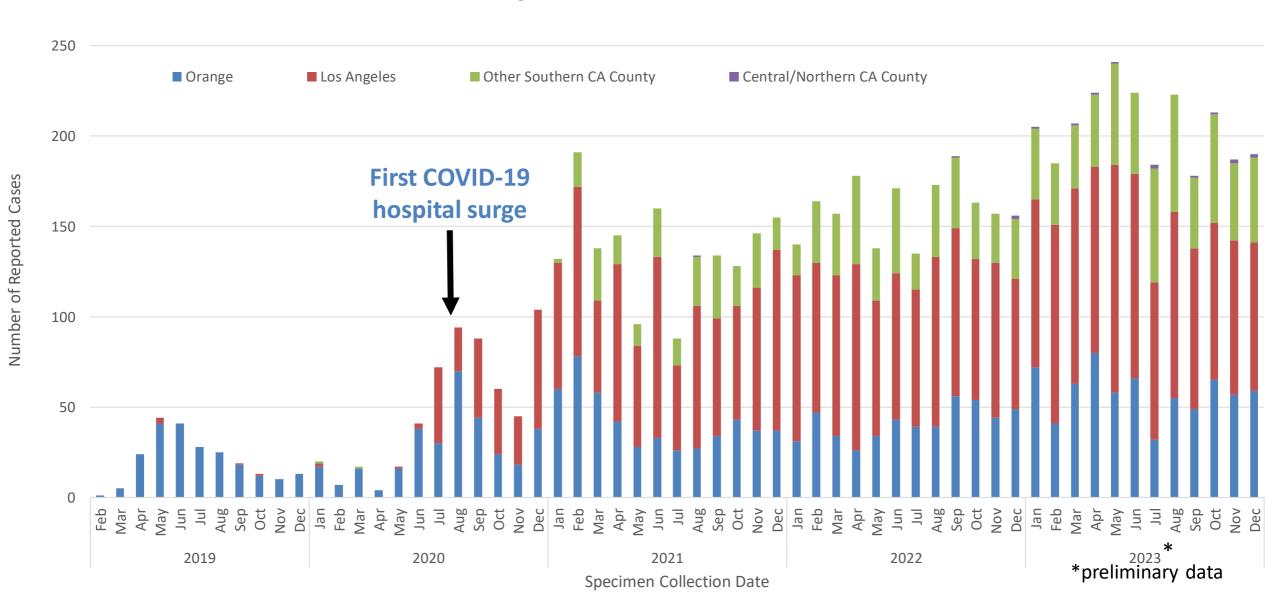
### Emergence of *C. auris* in Central and Northern CA



Number of cumulative reported cases □ 0 □ 1-10 □ 11-100 □ 101-500 □ 501-1000 □ >1000

California Department of PublicHealth

### Pandemic Contributed to Widespread and Sustained Transmission of *C. auris*

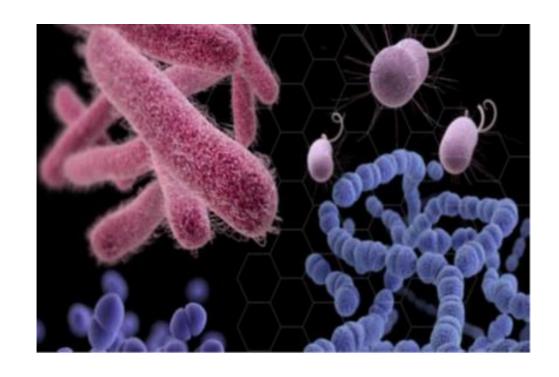


### **Challenges Using Contact Precautions in SNFs**

- Impractical to place all known MDRO-colonized residents on Contact Precautions when there's no ongoing transmission within a facility
  - SNF have few single occupancy rooms
  - Asymptomatic colonization with MDRO can be prolonged
  - No standard guidance for discontinuing Contact Precautions for MDRO colonization
  - 'PPE fatigue' in healthcare workers
  - PPE supply costs
  - Resident/family satisfaction



# **Enhanced Barrier Precautions is a Shift from Bacteria or Fungal- Centered Care...**





...to Resident-Centered Care

### **Who Needs Enhanced Barrier Precautions?**

- All residents with *any of the following*:
  - Infection or colonization
     with an MDRO when
     Contact Precautions do not
     apply
  - Wounds
  - Indwelling medical devices regardless of MDRO colonization status









- Urinary catheter
- Central lines/intravenous catheters
- Artificial ventilation
- G-tubes
- Other external devices

### Unhealed wounds

Drainage leads to environmental contamination



### **What** are the Tools of Enhanced Barrier Precautions?

Hand hygiene (hand sanitizer or soap and water)





Personal protective equipment (PPE): gloves, gowns

Environmental cleaning (EVS)





Personal protective equipment (PPE): mask or N95 and eye protection\*

\*Per standard precautions, if splash anticipated, or if the resident has an infection that is transmitted via respiratory secretions, add appropriate PPE (mask or N95, eye protection)



### **Core Infection Control Practices: Hand Hygiene**

- Use ABHS over soap and water unless visibly soiled hands
- Place ABHS dispensers in as many patient care locations as possible
- More then "just gel-in/gel-out"; remember the
   5 moments
- Gloves are NOT a substitute for hand hygiene (HH); perform HH before donning PPE, after doffing
- Perform HH adherence monitoring





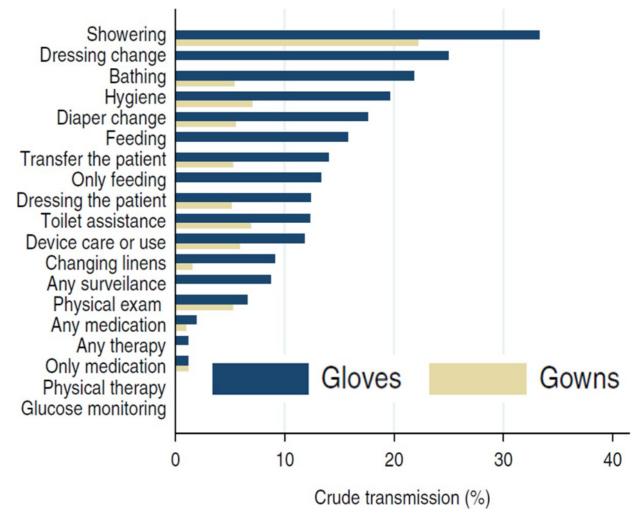
### **When** are the Moments of Enhanced Barrier Precautions?

During high-contact resident care activities:

- Dressing
- Bathing/showering
- Transferring
- Providing hygiene
- Handling soiled or changing linens (bed linens or resident clothing)
- Changing briefs, or assisting with toileting
- •Device care or use: central line, urinary catheter, feeding tube, tracheostomy/ventilator
- •Wound care: any skin opening requiring a dressing

# When are Resistant Gram-Negative Bacteria Transmitted to HCPs?

- Highest Risk:
  - Showering
  - Hygiene
  - Toileting
  - Wound dressing changes
- Lowest Risk:
  - Assist feeding
  - Giving meds
  - Glucose monitoring



Blanco et al. Infect Control Hosp Epidemiol 2018; 39:1425-1430

### **Morning and Evening Care**

- Use hand hygiene, gowns, and gloves during morning and evening care
  - Dressing
  - Grooming
  - Bathing/showering
  - Oral care, brushing teeth





## Changing Briefs, Assisting With Toileting, & Peri-Care

- Use hand hygiene, gowns and gloves during toileting, changing incontinence briefs, and performing peri-care
  - When moving from dirty to clean areas,
     remove gloves, use hand hygiene, and don
     clean gloves between tasks when necessary





### **Device Care and Use**

- Use hand hygiene, gowns, and gloves during care of indwelling devices such as
  - Urinary catheters
  - Intravascular catheters
  - Endotracheal/tracheostomy tubes
  - Feeding tubes
  - Medical treatments that require close contact with a high-risk resident and their environment such as respiratory treatments, tube feedings







### **Wound Care**

• Use hand hygiene, gowns and gloves during care of wounds and dressing changes





## **Transferring**

- Use hand hygiene, gown and gloves when assisting with mobility and when preparing a resident to leave the room
- HCP do not wear gown and gloves outside of the room
- Use PPE when handling resident clothing and/or changing bed linens





# **Cleaning and Disinfecting the Environment** (including additional considerations for CA SNFs)



- Use hand hygiene, gowns and gloves when cleaning the environment
- Examples of high-contact EVS activities for which EVS personnel should use gown and gloves while cleaning and disinfecting the environment around residents on EBP:
  - Removing soiled linen
  - Cleaning and disinfecting high-touch surfaces such as bed rails, remote controls, bedside tables or stands on or near the resident's bedspace
  - Terminal cleaning and disinfection

Project Firstline EVS Toolkit (ca.gov)

(www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/ProjectFirstlineEVSToolkit.aspx)

**Enhanced Barrier Precautions: Additional Considerations for CA SNFs** 

(www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/EBP AdditionalConsiderationsFor CA SNF.pdf

# Comparing Standard, Enhanced Barrier, Transmission-Based Precautions: Implementation

Precautions	Implementation			
STANDARD	<ul> <li>Hand hygiene, change PPE within room, before and after care activity</li> <li>All residents, everywhere</li> </ul>			
ENHANCED BARRIER	<ul> <li>Perform resident assessment for risk of MDRO colonization and transmission</li> <li>Hand hygiene, change PPE within room, before and after high-contact care activities</li> <li>Residents may leave room if they are able to observe required hygiene practices</li> </ul>			
TRANSMISSION- BASED	<ul> <li>Hand hygiene, change PPE upon room entry and exit</li> <li>Confine resident to room</li> <li>Single-bed room or cohort residents with same infection</li> </ul>			

# **Enhanced Barrier Precautions for Skilled Nursing Facilities: Frequently Asked Questions**



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

- No. Residents on EBP may share rooms with other residents; however, facilities
  with capacity to offer single-person rooms or create roommate pairs based on
  MDRO colonization (if known) may choose to do so.
- If there are multiple residents with a novel or targeted MDRO, consider **cohorting** them together in one wing or unit to decrease the direct movement of staff from colonized or infected residents to those who are not known to be colonized.



### **CDPH Cohorting Guidance**

- MDRO cohorts include patients or residents who are known to be infected or colonized with the same MDRO
- Two types of MDRO cohorts can be implemented in a healthcare facility:
  - 1. A within-room cohort is where patients or residents with the same MDRO or carbapenemase (e.g., KPC, NDM) are placed within one room, regardless of specimen source, infection, or colonization status.
  - 2. A multi-room cohort is a designated area of the facility that contains multiple within-room cohorts with the same MDRO or carbapenemase; e.g., multiple within-room cohorts are placed together at the end of a hallway, unit, or floor

MDRO Patient Cohorting (ca.gov)

Table 1. Principles of Patient or Resident Cohorting by MDRO Type

Organism	Examples	Cohorting Recommendations		
Candida auris (C. auris)	N/A	Cohort patients or residents with <i>C.</i> auris together with others that have <i>C.</i> auris, whenever possible		
Carbapenemase- producing organism (CPO)	Bacteria producing one or more carbapenemases, such as KPC, IMP, VIM, OXA, NDM, 1 e.g.,  • KPC-Escherichia coli  • NDM-Acinetobacter baumannii  • VIM-Pseudomonas aeruginosa	<ol> <li>Prioritize cohorting by the same carbapenemase(s) and organism combination, e.g.,         <ul> <li>KPC-E. coli with KPC-E. coli</li> <li>NDM/KPC-E. coli with NDM/KPC-E. coli</li> </ul> </li> <li>If not possible, cohort by carbapenemase(s), e.g.,         <ul> <li>KPC with KPC</li> <li>NDM/OXA-23 with NDM/OXA-23</li> </ul> </li> <li>Patient or resident with KPC, OXA-48, and NDM carbapenemases with another patient or resident that has KPC, OXA-48, and NDM carbapenemases</li> </ol>		
Carbapenem- resistant organism (CRO) (not tested for carbapenemases <sup>2</sup> )	<ul> <li>Carbapenem-resistant</li> <li>Enterobacterales (CRE)</li> <li>P. aeruginosa (CRPA)</li> <li>A. baumannii (CRAB)</li> </ul>	<ul> <li>Cohort by organism combination, e.g.,</li> <li>CRPA with CRPA</li> <li>Patient or resident with CRE and CRAB with another patient or resident with CRE and CRAB</li> </ul>		



# Do residents placed on EBP precautions require placement in a single-person room? (cont'd)

- When residents are placed in shared rooms, facilities must implement strategies to help minimize transmission of pathogens between roommates including:
  - Maintaining spatial separation of at least 3 ft. between beds to reduce inadvertent sharing of items between residents
  - Use of privacy curtains to limit direct contact
  - Cleaning and disinfecting any shared reusable equipment
  - Cleaning and disinfecting environmental surfaces more frequently
  - Changing PPE (if worn) and performing hand hygiene when switching care from one roommate to another.
- In other words, treat each bedspace as a separate room



## Are staff required to glove/gown every time they enter the

### room for a resident on EBP?

- No. PPE for EBP is only necessary when performing high-contact care activities
  and does not need to be donned prior to entering the resident's room.
- For example, staff entering the resident's room to answer a call light, converse with a resident, or provide medications who do not engage in a high-contact resident care activity would likely not need to employ EBP while interacting with the resident.



## Are staff required to glove/gown for all ADL care for residents

### on EBP?

- For residents for whom EBP are indicated, EBP is employed when performing the following high-contact resident care activities:
  - ✓ Dressing
  - ✓ Bathing/showering
  - ✓ Transferring
  - ✓ Providing hygiene
  - ✓ Changing linens

- ✓ Changing briefs or assisting with toileting
- ✓ Wound care
- ✓ Device care or use: central line, urinary catheter, tracheostomy/ventilator, feeding tube
- In general, gowns and gloves **not recommended in hallways or when performing transfers in common areas** (i.e., dining or activity rooms) where assist/contact anticipated to be shorter in duration.
- Outside the resident's room, EBP should be followed when performing transfers or assisting during bathing in a shared shower room and when engaging in high-contact activities with residents in the therapy gym.



## Gown and Glove Use by Family/Caregivers

- Visitors and family members only need to wear gown and gloves when
  participating in high-contact care activities for a resident on EBP, such as
  morning and evening care (the same practices as HCP providing such care)
- Visitors and family members should always perform hand hygiene upon entry to and exit from the room



### **Transitioning from Contact Precautions to EBP**

- During an MDRO outbreak, Contact Precautions may be indicated for residents known to be colonized or infected with the outbreak MDRO
- SNFs should consult their local health department for guidance on transitioning to EBP following an outbreak
- Readiness for transition to EBP includes:
  - Demonstration that MDRO transmission has been contained
  - Consistent staff adherence to core infection prevention and control practices, including hand hygiene, appropriate PPE use, and environmental cleaning and disinfection
  - Availability of hand hygiene and PPE supplies at points of care



### **Accepting New or Returning Residents**

- "All SNFs in compliance with the CMS's EBP requirement are able to admit and provide care for residents with MDROs. Thus, there is no basis for a SNF to refuse admission of a resident based on their need for EBP or MDRO status."
- Residents on EBP <u>do not</u> require placement in a single-person room, even when known to be infected or colonized with an MDRO.



# **Enhanced Barrier Precautions for Skilled Nursing Facilities: Implementation**



### **Pre-implementation Tool**

### Pre-Implementation Tool—Enhanced Barrier Precautions (EBP) (For use in Skilled Nursing Facilities/Nursing Homes only)

This NEW tool is designed to be used prior to implementation of EBP in your facility (either a unit, wing, or entire facility) as a guide for developing a successful plan for the implementation of EBP during high-contact resident care activities. It is intended for use in skilled nursing facilities/nursing homes.

This tool can be customized to meet facility-specific needs. EBP can be implemented in a manner that works best for your facility. While implementation of EBP for all residents who meet criteria is the goal, this may not initially be feasible for your facility. If during the development of your implementation plan, challenges arise for facility-wide implementation, you may choose to implement EBP on a unit or wing first, preferably one where most residents would meet criteria for the use of EBP (e.g., residents with indwelling medical devices, wounds, or known MDRO infection or colonization).

HCP can reduce personal protective equipment (PPE) consumption by bundling multiple high-contact resident care activities (e.g., changing briefs, assisting with toileting, bathing/showering and providing hygiene could be bundled with changing linens).

Fa	Facility Name:				
Date of Assessment:					
1.	Does your facility currently have a developed timeline for implementation of EBP?  Yes No Unknown  If yes, when do you expect to begin implementation?  In 3-4 weeks In 1-2 months In >2 months				
2.	If question 1 is answered "Yes", have you developed a policy and procedure document for the use of EBP?  Yes  No Unknown  If no, what challenges are you having with the development of a policy and procedure document?  Staffing shortages Leadership input Other, please specify:				
3.	Does your facility currently have an interdisciplinary team (IDT) that manages facility infection prevention and control practices?  Yes  No  Unknown  If yes, who currently serves on the facility's IDT? (Select all that apply)  Medical director  Director of Nursing  Nurse (RN, LPN, LVN)  Environmental services  Certified nursing assistant  Other, please specify:				



**HEALTHCARE-ASSOCIATED INFECTIONS PROGRAM** 

### **CDC EBP Pre Implementation Tool**

(www.cdc.gov/long-term-carefacilities/media/pdfs/Pre-Implementation-Tool-for-Enhanced-Barrier-Precautions-508.pdf)



### **Consider Facility Stakeholders**

Reflect on your EBP stakeholders:

Residents, family, visitors, HCP, leadership, medical staff, managers (nursing, environmental services (EVS), materials management, dietary), occupational health, director of staff development (DSD), contractors, others

How will each group of stakeholders be affected by EBP implementation?

- How will they participate in the EBP process?
- What "extra work" will be required of them?



## **Develop an Education Plan**

### Create a plan outlining:

- •Whom do you need to educate?
  - -Does your audience have special learning needs?
    - Language and reading level
    - Current level of understanding
- Educational setting/environment
  - -Will you begin with a pilot on one unit or roll out facility-wide?
- •Educational materials needed (e.g., slides, flip charts, pamphlets)
- Timeline
  - Due dates for completion
  - •Evaluation of competency with adherence monitoring results: Was your teaching effective?

## **EBP Implementation: Training**

□ Process for identifying residents who require EBP
 □ Room placement
 □ Resident hygiene
 □ Appropriate use of products used for cleaning and disinfection
 □ Appropriate use of PPE
 □ High-touch surface cleaning
 □ Intrafacility and interfacility resident transfers
 □ Shared medical equipment

<u>Frequently Asked Questions (FAQs) about Enhanced Barrier Precautions in Nursing Homes | LTCFs | CDC</u> (www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/faqs.html)

### **EBP Signage**

- Sign should include information of what PPE is needed to enter a room
  - Avoid using multiple signs with confusing directions
- Place where sign is visible to anyone entering the room
  - Facility may determine the best location for placement
  - Suggestions: Room doorway, head of resident's bed
  - May have posters in areas where EBP is being utilized for education and staff reminders
- CDPH and CDC signage available to download and print
  - Suggest laminating to allow cleaning and disinfecting



Insert new CDPH EBP sign here



### **CDC EBP Sign**





Place sign, or what facility decides, in a standard location that works in the facility (hallway, above head of bed for example) per facility policy to indicate the need for EBP and PPE during the resident's care



#### **HEALTHCARE-ASSOCIATED INFECTIONS PROGRAM**

Implementation-508.pdf)

	(Select all that apply)  Dressing Bathing/Showering Transferring Changing briefs or assisting with toileting Providing hygiene Changing linens Indwelling medical device care or use Wound care* Other, please specify:	rnich nigh-contact resident care activities was a gown and/or gioves not used?
		<u>qs.html</u> for clarification of wounds in the context of EBP
Enhanced Barrier Precautions (EBP) Implementation—C (For use in Skilled Nursing Facilities/Nursing Home	ent room door?	
his NEW tool should be used only after you have established the use of Enhanced Barrier Precautions nit, wing, or entire facility), and can be customized to meet the needs of the skilled nursing facility/nub support the conducting of observations of healthcare personnel (HCP) using EPB during high-contain fauditing and feedback. Responses should refer to current practices.	ng the room the specific actions they should take to protect themselves and the	
acility Name:		in information about the type of Precautions and the recommended PPE to be worn also include a list of the high-contact resident care activities for which PPE (gown and
ate of Assessment:	t individuals to speak to the nurse are not adequate to ensure EBP are followed. Signs diagnosis or the reason for the use of EBP (e.g., presence of a resistant germ, wound).	
ate of Assessment.	fentering the resident(s) room?	
Observations		
n general, these observations should be conducted covertly (i.e., HCP are not aware they are being observation on as many EBP practices as feasible across a variety of HCP types and care units (if EBP has been nit). While the observer should aim to assess as many of the listed elements as possible, ofte, only partial of sonly observing a HCP don (put on) but not doff (take off) personal protective equipment (PPE). However information on overall EBP practices in a facility.	nly)	
	☐ Inside the room	
	Other, please specify:	
	o access prior to room entry: "Ensure that healthcare personnel have immediate access to we, and dispose of PPE in a manner that protects themselves, the patient, and others." Practices for Safe Healthcare Delivery in All Settings (HICPAC) https://www.cdc.gov/	
Enhanced Parrier Processions (El	DD\ Implementation	Observations Tool (eds.gov)

Enhanced Barrier Precautions (EBP) Implementation—Observations Tool (cdc.gov

(www.cdc.gov/long-term-care-facilities/media/pdfs/Observations-Tool-for-Enhanced-Barrier-Precautions-



### **Summary**

- Enhanced Barrier Precautions is a risk factor-based, resident-centered strategy to prevent transmission of MDRO in SNF
- Successful implementation of EBP includes:
  - Engaged SNF leadership
  - Trained SNF infection preventionist and HCP, including nursing and EVS staff
  - Adherence monitoring of hand hygiene, appropriate PPE use, and environmental cleaning and disinfection



### **EBP FAQs**

www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/faqs.html

