

# ENHANCED BARRIER PRECAUTIONS IN NURSING HOMES ALGORITHM

The purpose of this algorithm is to outline when to use and how to implement Enhanced Barrier Precautions (EBP).

## EBP is indicated for residents who are:

- Known to be colonized or infected with a multidrug-resistant organism (MDRO) when Contact Precautions do not otherwise apply
- At increased risk of MDRO acquisition (e.g., resident has a wound or indwelling medical device)

**Q1. Does the resident have a suspected or confirmed infection (e.g., *C. difficile*, norovirus) or condition (e.g., scabies) that requires Contact Precautions according to [Appendix A](#) (Type and Duration of Precautions Recommended for Selected Infections and Conditions) of the [CDC Guideline for Isolation Precautions](#)?**

NO YES

CONTINUE to Q2

Use CONTACT PRECAUTIONS. Ensure your local health department has been notified if the infection/condition is [reportable](#).

**Q2. Does the resident have an MDRO infection or colonization?**

NO YES

CONTINUE to Q3

Ask the following two questions

**A. Does the resident have acute diarrhea, a draining wound, or other site of secretion or excretion that cannot be covered or contained?**

NO YES

EBP

CONTACT PRECAUTIONS

**B. Is the facility or unit(s) experiencing a suspected or confirmed MDRO outbreak?**

NO YES

EBP

CONTACT PRECAUTIONS

**Q3. Does the resident have a wound that cannot be covered or contained?**

NO WOUND

THE WOUND CAN BE COVERED/CONTAINED

YES

CONTINUE to Q4

EBP

CONTACT PRECAUTIONS

**Q4. Does the resident have an indwelling medical device?**

NO

YES

Use [Standard Precautions](#).

EBP

## EBP

If EBP is indicated: Using this algorithm, continue to assess the resident throughout their stay for changes that would indicate Contact Precautions should be used in place of EBP. Refer to pg. 2 for EBP implementation guidance.

## Contact Precautions

If Contact Precautions are indicated: Follow [CDC implementation guidance](#).

# ENHANCED BARRIER PRECAUTIONS IMPLEMENTATION

A private room is not required and the resident can participate in group activities. EBP should be maintained for the resident's entire stay or until wound(s) have healed and indwelling medical devices are no longer present.

In addition to following [Standard Precautions](#), gowns and gloves should be worn during the following 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

## STEPS TO IMPLEMENTATION

Prior to implementing EBP, make sure staff know the facility's expectations about hand hygiene and gown/glove use. Staff should be provided with initial and refresher training and have access to appropriate supplies.

### To implement EBP:



1. **Communicate to staff** which residents require EBP. Best practice is to post clear [signage](#) on the door or wall outside of the resident room indicating the type of precautions and required personal protective equipment (PPE) (e.g., gown and gloves). On the signage, include the high-contact resident care activities that require the use of a gown and gloves.



2. **Make PPE**, including gowns and gloves, available immediately outside of the resident room.



3. **Face protection** (e.g., facemask plus goggles or a face shield) may also be needed if performing an activity with the risk of splash or spray (e.g., irrigating a wound).



4. **Do not wear** the same gown and gloves for the care of more than one resident or reuse the gown and gloves for the same resident.



5. **Ensure access** to alcohol-based hand rub in every resident room (ideally both inside and outside of the room).



6. **Position a trash can** inside the resident room and near the exit for discarding PPE after removal, prior to exit of the room, or before providing care for another resident in the same room.



7. **Periodically monitor** and assess staff adherence to infection prevention practices, such as hand hygiene and PPE use, to determine the need for additional training and education.



8. **Provide education** to residents and visitors.

# DEFINITIONS

**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 lines (including hemodialysis catheters), indwelling urinary catheters, feeding tubes, tracheostomy tubes, and endotracheal tubes.

**Multidrug-resistant organisms (MDROs):** MDROs (multidrug-resistant or drug-resistant) are bacteria that are resistant to one or more classes of antimicrobial agents. CMS notes that EBP should be used for residents infected or colonized with a CDC-targeted MDRO when Contact Precautions do not otherwise apply. Facilities have discretion in using EBP for residents who are infected or colonized with an MDRO that is not currently targeted by CDC.

Examples of MDROs targeted by CDC include: pan-resistant organisms, carbapenemase-producing carbapenem-resistant Enterobacterales, carbapenemase-producing carbapenem-resistant *Pseudomonas* spp., carbapenemase-producing carbapenem-resistant *Acinetobacter baumannii*, *Candida auris*.

Additional epidemiologically important MDROs may include, but are not limited to: methicillin-resistant *Staphylococcus aureus* (MRSA), extended spectrum beta-lactamase (ESBL)-producing organisms, vancomycin-resistant Enterococci (VRE), multidrug-resistant *Pseudomonas aeruginosa*, drug-resistant *Streptococcus pneumoniae*.

**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.

**Wound:** Any skin opening requiring a dressing such as for chronic wounds (e.g., pressure ulcers, diabetic foot ulcers, unhealed surgical wounds, and chronic venous stasis ulcers). This does not include shorter-lasting wounds, such as skin breaks or skin tears covered with a Band-Aid or similar dressing.

## REFERENCES

CDC. (2024). *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>

CMS. (2024). *Enhanced Barrier Precautions in Nursing Homes (QSO-24-08-NH)*. <https://www.cms.gov/files/document/qso-24-08-nh.pdf>

VDH. (2024). Infection Control Precautions website. <https://www.vdh.virginia.gov/haiar/icprecautions/>