

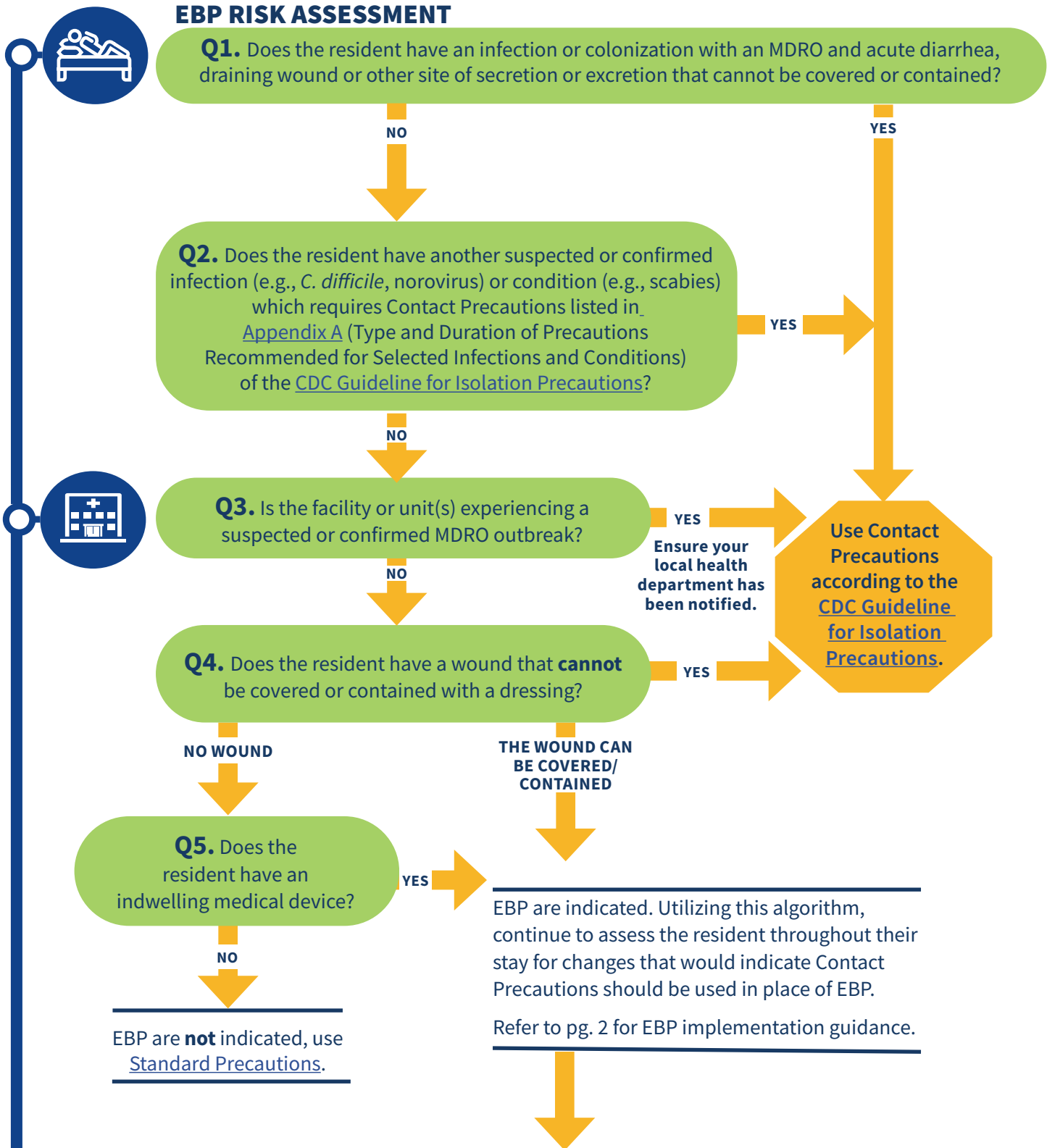
Enhanced Barrier Precautions in Nursing Homes Algorithm

The purpose of this algorithm is to outline when to use and how to implement enhanced barrier precautions (EBP).

EBP are indicated for the following 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)

Use the EBP risk assessment questions 1-5 to determine whether EBP may apply to an individual resident. If a resident meets criteria for EBP, refer to pg. 2 for the implementation steps.





ENHANCED BARRIER PRECAUTIONS IMPLEMENTATION

A private room is not required and the resident can participate in group activities. EBP should be maintained for the entire resident's stay or until 1) Wound(s) have healed; 2) 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 | • Changing linens |
| • Bathing/showering | • Changing briefs or assisting with toileting |
| • Transferring | • Device care or use |
| • Providing hygiene | • Wound care |



STEPS TO IMPLEMENTATION

With implementation, it is critical to ensure that staff have awareness of the facility's expectations about hand hygiene and gown/glove use, initial and refresher training, and access to appropriate supplies.

To accomplish this:

1. 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).
 - For Enhanced Barrier Precautions, signage should also clearly indicate 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. Incorporate periodic monitoring and assessment of adherence to recommended 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. The MDROs that are applicable for the use of EBP should be based on local epidemiology and, at a minimum, resistant organisms targeted by CDC and other epidemiologically important MDROs.

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. (2022). *Implementation of Personal Protective Equipment (PPE) Use in Nursing Homes to Prevent Spread of Multidrug-resistant Organisms (MDROs)*. <https://www.cdc.gov/hai/pdfs/containment/PPE-Nursing-Homes-H.pdf>

VDH. (2022). EBP website. <https://www.vdh.virginia.gov/haiar/ip/ipc-by-healthcare-setting/>

QUESTIONS? Contact your [local health department](#) or the VDH [HAI/AR program](#) at hai@vdh.virginia.gov