Related Topics:

Frequently asked questions about using enhanced barrier precautions in nursing homes to prevent MDROs. These FAQs were created to address questions about Enhanced Barrier Precautions as defined in the CDC guidance Implementation of Personal Protective Equipment (PPE) in Nursing Homes to Prevent Spread of Multidrug-resistant Organisms (MDROs). Enhanced Barrier Precautions are an infection control intervention designed to reduce transmission of multidrug-resistant organisms (MDROs) in nursing homes. Enhanced Barrier Precautions involve gown and glove use during high-contact resident care activities for residents known to be colonized or infected with a MDRO as well as those at increased risk of MDRO acquisition (e.g., residents with wounds or indwelling medical devices). As part of Standard Precautions, which apply to the care of all residents, the use of PPE is based on the "anticipated exposure" to blood, body fluids, secretions, or excretions. For example, gloves are recommended when contact with blood or other potentially infectious materials, mucous membranes, non-intact skin, or contaminated equipment could occur. A gown is recommended to protect skin and prevent soiling of clothing during procedures and activities that could cause contact with blood, body fluids, secretions, or excretions. Enhanced Barrier Precautions expand the use of gown and gloves beyond anticipated blood and body fluid exposures. They focus on use of gown and gloves during high-contact resident care activities that have been demonstrated to result in transfer of MDROs to hands and clothing of healthcare personnel, even if blood and body fluid exposure is not anticipated. Enhanced Barrier Precautions are recommended for

residents known to be colonized or infected with a MDRO as well as those at increased risk of MDRO acquisition (e.g., residents with wounds or indwelling medical devices). Standard Precautions still apply while using Enhanced Barrier Precautions. For example, if splashes and sprays are anticipated during the high-contact care activity, face protection should be used in addition to the gown and gloves. Contact Precautions require the use of gown and gloves on every entry into a resident's room, regardless of the level of care being provided to the resident. The resident is given dedicated equipment (e.g., stethoscope and blood pressure cuff) and is placed in a private room. When private rooms are not available, some residents (e.g., residents with the same pathogen) may be roomed together. Residents on Contact Precautions are recommended to be restricted to their rooms except for medically necessary care, including restriction from participation in group activities. Contact Precautions are generally intended to be time limited and, when implemented, should include a plan for discontinuation or de-escalation. Enhanced Barrier Precautions require the use of gown and gloves only for high-contact resident care activities (unless otherwise indicated as part of Standard Precautions). Residents are not restricted to their rooms and do not require placement in a private room. Enhanced Barrier Precautions also allow residents to participate in group activities. Because Enhanced Barrier Precautions do not impose the same activity and room placement restrictions as Contact Precautions, they are intended to be in place for the duration of a resident's stay in the facility or until resolution of the wound or discontinuation of the indwelling medical device that placed them at higher risk.

Contact Precautions are recommended if the resident has acute diarrhea, draining wounds, or other sites of secretions or excretions that are unable to be covered or contained or for a limited period of time during a suspected or confirmed MDRO outbreak investigation. If neither criteria are met and the resident does not have another indication for Contact Precautions (See Question 5), then Enhanced Barrier

Precautions could be used, unless otherwise directed by public health authorities.

No. Enhanced Barrier Precautions are intended for MDROs (other than Clostridioides difficile) and do not replace existing guidance regarding use of Contact Precautions for other pathogens (e.g., Clostridioides difficile, scabies, norovirus) and conditions in nursing homes. Refer to Appendix A – Type and Duration of Precautions Recommended for Selected Infections and Conditions of the CDC Guideline for Isolation Precautions for a list of infections and other conditions where Contact Precautions is recommended.

No, at this time, CDC has not recommended implementation of Enhanced Barrier Precautions (EBP) in other healthcare settings. All healthcare facilities should have practices in place to prevent transmission of multidrug-resistant organisms (MDROs). Acute care facilities routinely use Contact Precautions as one strategy to prevent MDRO transmission. Contact Precautions has created challenges for nursing homes trying to balance interventions to prevent MDRO transmission with residents' quality of life. EBP is a less restrictive approach to MDRO prevention that places fewer limitations on resident activities than Contact Precautions. The studies that informed EBP, including defining which care activities most commonly result in transfer of MDROs to staff hands and clothing, were conducted in adult nursing home populations. Such activities and risks might be different among pediatric nursing home populations and additional consideration is needed when implementing EBP in these settings. Nursing homes with pediatric residents who implement EBP for their pediatric population as part of their MDRO prevention plan may need to redefine high-contact resident care activities based on the anticipated degree of contact and developmental abilities of pediatric residents (e.g., repositioning an infant compared to a young adult may require different levels of assistance). The evidence that Enhanced Barrier Precautions are effective at preventing MDRO transmission is summarized in the document, Consideration for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities.

The high-contact resident care activities described in the guidance were chosen based

on hundreds of observations of care in nursing homes that evaluated the potential for antibiotic-resistant bacteria to contaminate the hands and clothing of healthcare personnel. Those activities that demonstrated the highest risk for transfer to hands and clothing were included in the CDC guidance. Further information is summarized in the document, Consideration for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities. This list may not be fully exhaustive; facilities could consider adding other activities specific to their residents.

While this guidance focuses on gown and glove use, prevention of MDRO transmission in nursing homes requires much more than just proper use of personal protective equipment (PPE). Adherence to other recommended infection prevention practices including performing hand hygiene, cleaning and disinfection of environmental surfaces and resident care equipment, proper handling of indwelling medical devices, and care of wounds is also critical. CDC and health departments continue to identify gaps in recommended infection prevention practices as part of on-site infection control assessments in nursing homes. Examples include lack of access to alcohol-based hand sanitizer in resident rooms and other care areas; lack of access to EPA-registered disinfectants at the point of use; and failure to clean and disinfect shared resident care equipment after each use. During public health outbreak responses and as a part of a Containment Strategy, facilities are provided guidance and support to improve all aspects of their infection prevention practices, in addition to implementing EBP. CDC has created a comprehensive, free, online training course for nursing homes addressing development and implementation of an infection prevention program. Nursing homes are encouraged to have staff review relevant modules and to use the resources provided in the training (e.g., policy and procedure templates, auditing checklists) to assess and improve practices in their facility. Communicating infection prevention expectations to staff, ensuring access to necessary supplies, and initial as well as refresher trainings are essential. Assuming Contact Precautions do not otherwise apply,

Enhanced Barrier Precautions are recommended for residents with any of the following: 1) infection or colonization with a MDRO or 2) a wound or indwelling medical device, even if the resident is not known to be infected or colonized with a MDRO. While prior iterations of the Enhanced Barrier Precautions guidance were intended for use solely during public health response activities, Enhanced Barrier Precautions are currently recommended to be used broadly, in all units across the whole facility, for residents who meet the above criteria. This broader application includes facilities where targeted MDROs have not yet been identified and is intended to minimize the transmission of MDROs in nursing homes.

Even if the resident colonized with a MDRO is placed on Contact Precautions (e.g., for uncontained secretions or excretions, acute diarrhea, draining wounds, or ongoing transmission within the unit or facility is suspected), Enhanced Barrier Precautions are still recommended for other at-risk residents (i.e., those with indwelling medical devices or wounds) in the facility.

There may be circumstances when performing screening cultures for presence of certain MDROs could be appropriate, especially as part of public health prevention or response measures to address antimicrobial resistance. However, pre-emptive screening to determine a resident's MDRO status solely for the purpose of implementing Enhanced Barrier Precautions is not recommended. Enhanced Barrier Precautions are intended to provide an approach for gown and glove use that is based on resident risk factors and type of care being provided, rather than solely based on MDRO status, especially for residents at risk for MDRO acquisition (i.e., presence of indwelling medical devices or wounds).

Yes. Enhanced Barrier Precautions are recommended for residents with indwelling medical devices or wounds, who do not otherwise meet the criteria for Contact Precautions, even if they have no history of MDRO colonization or infection and regardless of whether others in the facility are known to have MDRO colonization. This

is because devices and wounds are risk factors that place these residents at higher risk for carrying or acquiring a MDRO and many residents colonized with a MDRO are asymptomatic or not presently known to be colonized.

Indwelling medical devices and wounds are risk factors for colonization with a MDRO. Once colonized, these residents can serve as sources of transmission within the facility. The expansion of EBP for all residents with wounds or indwelling medical devices is intended to protect these high-risk individuals both from acquisition and from serving as a source of transmission if they have already become colonized. Additional resources are summarized in the document, Consideration for Use of Enhanced Barrier Precautions in Skilled Nursing Facilities.

At a minimum, Enhanced Barrier Precautions are intended to be used for residents colonized or infected with novel (e.g., those newly introduced or emerging in a locality or region) MDROs or MDROs targeted by CDC. The Enhanced Barrier Precautions guidance also provides facilities and jurisdictions the flexibility to implement Enhanced Barrier Precautions for residents colonized or infected with additional MDROs that may be epidemiologically important locally. Determinations about an organism being epidemiologically important may be influenced by factors that include: local epidemiology, presence of ongoing or past outbreaks, propensity for transmission in healthcare facilities, association with severe outcomes, or targeting for local prevention efforts. No. Single-person rooms (if available) should be prioritized for residents who have acute infection with a communicable disease (such as influenza, SARS-CoV-2, hepatitis A) or for residents placed on Contact Precautions for presence of acute diarrhea, draining wounds, or other sites of secretions or excretions that are unable to be covered or contained. Residents on Enhanced Barrier Precautions may share rooms with other residents; however, facilities with capacity to offer single-person rooms or create roommate pairs based on MDRO colonization may choose to do so. Further, if there are multiple residents with a novel or targeted MDRO in the same facility,

consider cohorting them together in one wing or unit to decrease the direct movement of healthcare personnel from colonized or infected residents to those who are not known to be colonized. 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 feet between beds to reduce opportunities for inadvertent sharing of items between the residents, use of privacy curtains to limit direct contact, cleaning and disinfecting any shared reusable equipment, cleaning and disinfecting environmental surfaces on a more frequent schedule, and changing personal protective equipment (if worn) and performing hand hygiene when switching care from one roommate to another.

Enhanced Barrier Precautions are intended to be used for the duration of a resident's stay in a facility. A transition back to Standard Precautions, alone, might be appropriate for residents placed on Enhanced Barrier Precautions solely because of the presence of a wound or indwelling medical device when the wound heals or the device is removed.

Residents colonized with a novel or targeted MDRO are intended to remain on Enhanced Barrier Precautions for the duration of their stay in a facility. Because MDRO colonization is typically prolonged and follow-up testing to determine clearance may yield false negatives, CDC does not recommend routine retesting of residents with a history of colonization or infection with a MDRO or discontinuation of Enhanced Barrier Precautions after a subsequent negative test. The resident should be maintained on Contact Precautions in the nursing home if he or she has acute diarrhea, draining wounds, or other sites of secretions or excretions that are unable to be covered or contained or for a limited period of time during a suspected or confirmed MDRO outbreak investigation. If none of these are present, Enhanced Barrier Precautions would typically be appropriate for the management of this resident, unless otherwise directed by public health authorities.

Not necessarily. Gowns and gloves are the minimum level of PPE required for these

high-contact resident care activities. However, as part of Standard Precautions, additional PPE may be required depending on the resident. For example, face protection would also be required for activities where splashes and sprays are likely (e.g., wound irrigation, tracheostomy care).

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.

An indwelling medical device provides a direct pathway for pathogens in the environment to enter the body and cause infection. Examples of indwelling medical devices include, but are not limited to, central vascular catheters (including hemodialysis catheters, peripherally-inserted central catheters (PICCs)), 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. Although the data are limited, CDC does not currently consider peripheral I.V.s (except for midline catheters), continuous glucose monitors, and insulin pumps as indications for Enhanced Barrier Precautions. An ostomy in a resident without an associated indwelling medical device, would not be considered an indication for Enhanced Barrier Precautions. In the guidance, wound care is included as a high-contact resident care activity and is generally defined as the care of any skin opening requiring a dressing. However, the intent of Enhanced Barrier Precautions is to focus on residents with a higher risk of acquiring an MDRO over a prolonged period of time. This generally includes residents with chronic wounds, and not those with only

shorter-lasting wounds, such as skin breaks or skin tears covered with a Band-aid or similar dressing. Examples of chronic wounds include, but are not limited to, pressure ulcers, diabetic foot ulcers, and chronic venous stasis ulcers. Ostomies, such as colostomies or ileostomies, are not defined as a wound for Enhanced Barrier Precautions. The presence of an indwelling device is a major risk factor for being colonized with or acquiring a MDRO. Therefore, 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 involve only limited physical contact between the healthcare worker and the resident (e.g., passing medications through a feeding tube). This is only appropriate if the activity is not bundled together with other high-contact care activities and there is no evidence of ongoing transmission in the facility. Facilities should define these limited contact activities in their policies and procedures and educate healthcare personnel to ensure consistent application of Enhanced Barrier Precautions.

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. Enhanced Barrier Precautions is primarily intended to apply to care that occurs within a resident's room where high-contact resident care activities, including transfers, are bundled together with other high-contact activity, such as part of morning or evening care. This extended contact with the resident and their environment increases the risk of MDRO spreading to staff hands and clothes. Outside the resident's rooms, Enhanced Barrier Precautions should be followed when performing transfers and 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. Hand hygiene is recommended before and after resident contact.

Depending on the activity, therapy may be considered "high-contact" resident care. Therapists should use gowns and gloves when working with residents on Enhanced Barrier Precautions in the therapy gym or in the resident's room if they anticipate prolonged, close body contact where transmission of MDROs to the therapist's clothes is possible. EBP should not limit a resident's ability to continue their medical therapy, so while the use of a gown and gloves is generally discouraged in hallways and other common areas, there may be individual circumstances (e.g., therapy that has to occur outside of the resident's room or therapy gym) that prompt an evaluation for the need to use PPE outside of the room or gym, depending on the degree of assist/close contact. As part of Standard Precautions, gowns and gloves should be removed and hand hygiene performed when moving to work with another resident. Therapists should also ensure reusable therapy equipment is cleaned and disinfected after each use and surfaces in the therapy gym receive routine cleaning and disinfection.

The research that was the basis for the current guidance evaluated high-contact resident care activities, not specifically the risk of transmission of MDROs to the hands or clothing of Environmental Services (EVS) or housekeeping personnel. However, changing linen is considered a high contact resident care activity; gowns and gloves should be worn by EVS personnel if they are changing the linen of residents on Enhanced Barrier Precautions and could be considered for additional environmental services or housekeeping responsibilities that involve extensive contact with the resident or the resident's environment. Gown and glove use by EVS should be based on facility policy and for anticipated exposures to body fluids, chemicals, or contaminated surfaces. It is important to remember, gowns and gloves should be worn by EVS personnel when cleaning and disinfecting the rooms of residents on Contact Precautions.

No. Signs are intended to signal to individuals entering the room the specific actions they should take to protect themselves and the resident. To do this effectively, the sign

must contain information about the type of Precautions and the recommended PPE to be worn when caring for the resident. Generic signs that instruct individuals to speak to the nurse are not adequate to ensure Precautions are followed. Signs should not include information about the resident's diagnosis or the reason for the Precautions (e.g., presence of a resistant pathogen); inclusion of that information would violate HIPAA and resident dignity. CDC has created examples of signs that can be used by facilities to communicate information about Transmission-Based and Enhanced Barrier Precautions. Facilities can use these signs or modify them to create signs that work for their facility.

You should refer to local and state regulations regarding disposal of medical waste. The OSHA Bloodborne Pathogen Standard uses the term "regulated waste" to refer to the following categories of waste which require special handling, at a minimum: liquid or semi-liquid blood or other potentially infectious materials (OPIM); contaminated items that would release blood or OPIM in a liquid or semi-liquid state if compressed; items that are caked with dried blood or OPIM and are capable of releasing these materials during handling; contaminated sharps; pathological and microbiological wastes containing blood or OPIM. Based on this definition, most PPE used during resident care, including care of residents placed in Enhanced Barrier or Transmission-Based Precautions, would not fall into the category of regulated medical waste requiring disposal in a biohazard bag, and could be discarded as routine non-infectious waste. Facilities should remember to have an appropriate disposal container available in the resident room to allow for removal of PPE inside the room. However, local or state regulations may be more restrictive than this federal standard, so you should refer to those when making decisions. This website provides resources for patients, families and caregivers on the prevention of infections in nursing homes and assisted living facilities.

Source URL: https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/faqs.html