BLOC COVID+ 2023



Multi-Drug Resistant Organisms (MDROs) & Enhanced Barrier Precautions (EBP)

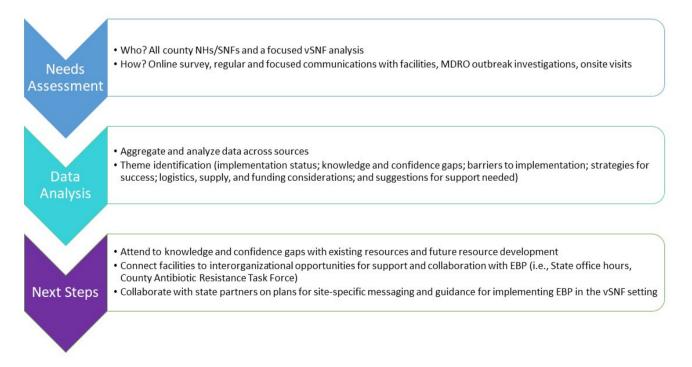
Tacoma-Pierce County Health Department (TPCHD)

Background

MDROs are organisms that are resistant to multiple antibiotics, making them difficult to treat. MDROs pose a particular threat to residents of long-term care settings. Up to 50% of nursing home residents may be colonized with an MDRO and colonization may persist for several months. Without proper infection prevention efforts, healthcare workers can unknowingly spread these organisms to other residents. EBP is one approach that uses targeted gown and glove use for certain residents during specific high-contact care activities associated with MDRO transmission. EBP allows individuals freedom to participate in group activities and communal dining while reducing MDRO spread in long-term care settings. EBP is currently recommended for implementation in nursing homes (NH) and skilled nursing facilities (SNF).

Approach

We focus on providing assessment, education and trainings for healthcare workers to provide tools and resources to help decrease Healthcare Associated Infections. Using a collaborative approach, we reached out to long-term care facilities to assess their needs, evaluate readiness, and assist them to implement EBP and future directions.



Results & Opportunities

Most facilities who responded had heard about EBP, but they had many questions. They requested our support to provide education and tools to implement these strategies. In addition to the complexity of the topic, key barriers included time and funding constraints, managing limited resources, and juggling multiple IP projects.

Lessons Learned

Facility staff have varying levels of knowledge and confidence regarding EBP and can benefit from individually tailored support from public health. Employing multiple modalities for communication and resource sharing and working with state and local partners is critical to the ongoing support of our facilities implementing EBP.

Takeaways for Facilities

Some helpful strategies when implementing EBP:

- Develop EBP policy and procedure for your facility.
 - Be sure to integrate an Interfacility infection control transfer form and Collective Medical Technologies (CMT).
- Start small (one wing, hall, or unit).
 - Use a model for improvement like a Plan-Do-Study-Act (PDSA) cycle to develop an implementation plan.
 - Start with residents infected or colonized with an MDRO. Then plan to include those with wounds and medical devices.
- Use a variety of methods in your education and messaging.
 - Scenario-based questions are often helpful to integrate into staff training.
 - Include information about MDROs and EBP in resident, family, and visitor communications (i.e., admission materials, email newsletters).

Examples of Targeted MDROs

Additional Important MDROs

- Pan-resistant organisms
- Carbapenemase-producing carbapenem resistant Enterobacterales
- Carbapenemase-producing carbapenem resistant Pseudomonas spp.
- Carbapenemase-producing carbapenem resistant Acinetobacter baumannii
- Candida auris

- Methicillin-Resistant Staphylococcus Aureus (MRSA)
- Extended Spectrum Beta-Lactamase (ESBL) Producing Enterobacteriaceae
- Vancomycin-Resistant Enterococcus (VRE)
- Carbapenem-Resistant
 Enterobacteriaceae
- Multidrug-Resistant Pseudomonas
 Aeruginosa

EBP are recommended for residents with any of the following:

Infection or colonization with an MDRO (when contact precautions do not otherwise apply)

Presence of wound or indwelling medical devices, regardless of MDRO colonization status





Bathing/Showering Transferring

Changing Linens Providing Hygiene

roviding Hyglene 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

the same down and

Do not wear the same gown and gloves for the care of more than one person.



References

- https://www.cdc.gov/hai/pdfs/containment/PPE-Nursing-Homes-H.pdf
- https://www.cdc.gov/infectioncontrol/pdf/webinarslides/Webinar-EBPinNH-Nov2022-Slides-508.pdf
- https://www.cdc.gov/hai/containment/faqs.html
- https://www.cdc.gov/hai/pdfs/containment/enhanced-barrier-precautions-sign-P.pdf
- https://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx#:~:text=The %20Plan%2DDo%2DStudy%2D,used%20for%20action%2Doriented%20learning
- https://hsrmp.phhp.ufl.edu/wordpress/files/2023/05/IPC-Manual-Revised.pdf
- https://doh.wa.gov/sites/default/files/2022-10/EBP%20Presentation%202022%20_1.pdf?uid=64266fda83ef2