



**Shared
Healthcare
Intervention to
Eliminate
Life-threatening
Dissemination of MDROs**

What to Expect

What is SHIELD?

SHIELD (Shared Healthcare Intervention to Eliminate Life-threatening Dissemination of MDROs) is a quality improvement performance improvement (QAPI) decolonization program for nursing homes to reduce MDRO spread and infections.

SHIELD was initially a regional demonstration project in 38 healthcare facilities (18 hospitals, 17 nursing homes and 3 long term acute care hospitals (LTACHs) in Orange County, California. The intervention resulted in substantial reductions in MDROs in participating facilities and county-wide. Because of this success, the protocols and training materials are being made available here in editable and pdf formats.

Why adopt the SHIELD program?

The SHIELD intervention is right for you if:

- Your facility is experiencing cultures or infections due to MDROs
- Your facility is worried about MDROs in general
- Your facility is willing to do a campaign to reduce MDROs
- Your facility is interested in the benefits of “decolonization” but needs “how to” help

The SHIELD program is effective against the following organisms:

- CRE: Carbapenem-Resistant Enterobacteriaceae
- MRSA: Methicillin Resistant *Staphylococcus aureus*
- VRE: Vancomycin-Resistant Enterococcus
- ESBL: Extended Spectrum Beta-Lactamase Producers

What is the decolonization intervention?

In the SHIELD program, decolonization refers to the use of topical products to reduce bacteria on the body that can produce harmful infections. For nursing homes, this includes:

- Chlorhexidine (CHG) bathing on admission and for routine bathing or showering. This involves 2% leave-on CHG for bed baths and 4% rinse-off CHG for showers.
- Nasal iodophor (10% povidone iodine) swabs for the nose given twice daily for 5 days on admission followed by a schedule of Monday-Friday every other week for all residents.

What are the SHIELD steps for implementation?

The following steps are recommended for a successful implementation. Like many infection prevention programs, it takes time to achieve culture change. Expect that it will take a full quarter to achieve solid adoption after training, feedback, and encouragement.

- Step 1:** Discuss with nursing home leadership to confirm program is for you
- Step 2:** Use provided QAPI forms to present at Quality Assurance/Medical Director meetings and document adoption of the program
- Step 3:** Purchase product
- Step 4:** Ensure chlorhexidine (CHG) compatibility of lotions and skin products
- Step 5:** Change from chlorine bleach to peroxide bleach to avoid the interaction between CHG and chlorine bleach that produces brown stains in laundry
- Step 6:** Train staff using provided educational materials, handouts, and videos
- Step 7:** Inform residents with provided admission packet materials and communication flyers for Resident's Council and local Ombudsman
- Step 8:** Establish order sets (examples provided)
- Step 9:** Perform one-time baseline skin check prior to beginning intervention
NOTE: Prior to launching CHG intervention, check for and document skin lesions, wounds or rashes. Staff may be more attentive to residents' skin when starting to use a new soap and may misattribute skin issues to CHG that already existed previously
- Step 10:** Begin intervention

Step 11: Use skills assessment checklists to check quality of bathing and nasal application and provide feedback to improve process

Step 12: Monitor progress using key outcomes, for example, consider monitoring MDRO cultures, use of contact precautions, HAI infections, antibiotic use, and hospital transfers for infection

How does the SHIELD toolkit help with implementation?

The SHIELD toolkit provides the following in pdf or editable Word documents

- Sample QAPI forms to use at Quality Assurance/Medical Director meetings to document adoption of the program
- Sample resident plan of care options
- Standardized nursing home protocols and step-by-step directions
- Educational materials for training and assessment
- Staff and resident handouts, including 1-page “how to” guides
- Resident communication and FAQs for nursing staff to respond to questions
- Skills assessment checklists
- Brief video links for training for showering or bed bathing

