

# The True Cost of an MDRO Outbreak

**Multidrug-resistant organisms (MDROs)** continue to develop and spread in health care settings. Research has shown potentially 50% of nursing home residents are colonized (carrying the germ without symptoms) by at least one MDRO<sup>1</sup>.

MDROs are difficult to treat because they do not respond to many common antibiotics, even the most powerful ones. Some MDROs even linger in the care environment and are so difficult to remove that even after enhanced cleaning, they can be detected at a rate of over 13%<sup>2</sup>.



## What Can an MDRO Outbreak Look Like?

In a model using cost data for a nursing home that is not using **Enhanced Barrier Precautions (EBP)** during a *C. auris* outbreak conducted by the Washington State Department of Health, the impacts of MDROs in nursing homes can be substantial:



Staffing needs  
**DOUBLED**



**COSTS TRIPLED**  
compared to the expense  
of an Enhanced Barrier  
Precautions (EBP) strategy



Mortality rate of  
**1 OUT OF 3  
INFECTED  
PEOPLE<sup>3</sup>**



## What are Enhanced Barrier Precautions?

Residents can be a source of transmission for their entire stay at a nursing home. An infection prevention strategy called Enhanced Barrier Precautions (EBP) can help your nursing home prevent MDRO outbreaks.

**EBP focuses on the targeted use of clean gowns and gloves when performing high-contact care activities with residents who are known to have, or are at increased risk of carrying an MDRO<sup>4</sup>.**

### HIGH-CONTACT ACTIVITIES CAN INCLUDE:

- |              |                   |   |
|--------------|-------------------|---|
| Dressing     | Providing hygiene | Indwelling medical device care            |
| Bathing      | Changing linens   | Assisting in toileting or changing briefs |
| Transferring | Wound care        |   |

This material was adapted with permission from the Washington State Department of Health.

1 McKinnell JA, Miller LG, Singh RD, et al. High Prevalence of Multidrug-Resistant Organism Colonization in 28 Nursing Homes: An "Iceberg Effect". J Am Med Dir Assoc. 2020;21(12):1937-1943.e2. doi:10.1016/j.jamda.2020.04.007  
 2 Huang J, Cui C, Zhou S, Chen M, Wu H, Jin R, Chen X. Impact of multicenter unified enhanced environmental cleaning and disinfection measures on nosocomial infections among patients in intensive care units. J Int Med Res. 2020 Aug;48(8):300060520949766. doi: 10.1177/0300060520949766. PMID: 32820692; PMCID: PMC7444124.  
 3 Benedict, K., Forsberg, K., Gold, J., Baggs, J., & Lyman, M. (2023). Candida auris-Associated Hospitalizations, United States, 2017–2022. Emerging Infectious Diseases, 29(7), 1485-1487. https://doi.org/10.3201/eid2907.230540.  
 4 Centers for Disease Control and Prevention. (2023, August 1). Implementation of Personal Protective Equipment (PPE) use in nursing homes to prevent spread of multidrug-resistant organisms (mdros). Centers for Disease Control and Prevention. https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html