

Infection Prevention Press

December 2024

MDRO Screenings

MDRO screenings through AR Lab Network (ARLN)

By Caleb Cox, Senior AR epidemiologist

Colonization screening is the use of laboratory testing to identify colonized individuals by testing for the presence of novel or targeted multidrug-resistant organisms (MDROs) on or in the body of an individual. Colonization is the presence of an organism on or in the body of an individual without causing signs or symptoms of infection; however, these individuals can still be a source of spread. They are also at higher risk of developing infections with the colonizing organism. Targeted MDROs in Indiana include carbapenamase producing organisms (CPO) (e.g. carbapenamase producing carbapenem resistant Pseudomonas aeruginosa (CP-CRPA), carbapenamase producing carbapenem resistant Acinetobacter baumannii (CP-CRAB), carbapenamase producing carbapenem resistant Enterobacterales (CP-CRE), Candida auris, vancomycinintermediate and -resistant Staphylococcus aureus (VISA/VRSA), and pan-drug resistant organisms.

For targeted MDROs in Indiana, there are two main screening strategies: admission screening and targeted screening. Admission screening is used to identify an individual with an MDRO at the time of admission. Targeted screenings, sometimes referred to as Point Prevalence Surveys (PPS), are performed unit- or facility-wide. These help to better understand the burden of a particular MDRO in a facility.



Axilla/Groin Sample Collection Kit



Rectal Sample Collection Kit

MDRO screenings continued...



Screening for MDROs can be arranged, free of charge, through Indiana's antimicrobial resistance lab network (ARLN) regional lab, the Wisconsin State Laboratory of Hygiene (WSLH). Recommendations vary and are dependent on the organism and facility type. Screening is not

available through the ARLN for VISA. IDOH and the CDC do not generally recommend screening of healthcare professionals. In all instances, screening is always voluntary for the individual and the facility should obtain informed consent before the screening specimen is collected.

Screening represents the only way to identify individuals colonized with a targeted MDRO. Its main benefit is the identification of unrecognized carriers so that infection prevention and control measures (IPC) can be targeted to prevent the spread of antimicrobial resistance. Another benefit is the evaluation of IPC practices at a facility using recurrent screens. These screens assess for potential transmission.

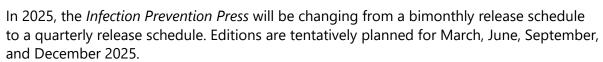
If transmission has been identified at a facility, screening may provide evidence of control of said transmission. CDC defines control of transmission as two consecutive PPSs with no new MDRO cases identified, or, in facilities with high colonization pressure (i.e., >30%), substantially decreased transmission.

Please contact the **AR team at IDOH** if your facility is interested in discussing screening for targeted MDROs.



IP Press release schedule changing in 2025

By Bethany Lavender, Infection prevention epidemiologist II





As always, you can find old editions on the **IDOH Infection Prevention webpage.** If you are not already signed up, please consider registering to receive the **IDOH LTC Division Newsletter**.

If you have suggestions about what you would like to see in future editions of the *IP Press* newsletter, email Bethany Lavender at Blavender@health.in.gov.

What is cohorting?

By Janene Gumz-Pulaski, IP Program Manager and Mary Enlow, Southern Region IP

Cohorting is the practice of grouping residents with the same organism together when a single room is not available. Below are key points to help when cohorting residents.

Determine patient placement based on the following principles:

- Modes of transmission of the known or suspected infectious organism
- Risk factors for transmission
- Risk factors for adverse outcomes
- Availability of single-patient rooms

Measures to be practiced while cohorting:

- If there are multiple residents with a novel or targeted MDRO in the same facility consider cohorting residents on a unit, hall, or designated area
- Dedicate or assign staff (nurses, CNA, housekeeping, etc.)
- Single or private room
 - When private rooms are not available, some residents (e.g., residents with the same pathogen) may be roomed together with the following measures in place:
 - Maintaining separation between beds to prevent sharing of items
 - Use privacy curtains to limit direct contact
 - ♦ Change personal protective equipment and perform hand hygiene when switching care from one roommate to another
 - ♦ Clean and disinfect any shared reusable equipment
 - ♦ Clean and disinfect environmental surfaces on a more frequent schedule
 - ♦ If a LTC resident, refer to CDC's **enhanced barrier precautions FAQs**
- If multiple organisms are present, reach out to the local health department, Indiana Department of Health (IDOH), <u>Healthcare-associated Infection-Antimicrobial Resistant (HAI-AR) epidemiologists</u>, and/or your <u>regional Infection Preventionist</u> to help with cohorting

Infection Prevention/Cleaning and Disinfection	Disinfecting can kill harmful germs that remain on surfaces after cleaning and lower the risk of spreading disease
Regular cleaning of surfaces helps to prevent the spread of germs	 Use a EPA-registered disinfecting product for the specific germ (such as viruses or bacteria) Use EPA-registered disinfecting product in accordance with manufacturer's instructions (MFI)
Clean and disinfect equipment, frequently touched surfaces (e.g., bed rails, over bed tables), and area in the patient care environment (e.g., doorknobs, toilets) in patients' rooms on a more frequent schedule	 Clean the surface first prior to disinfecting Make sure the products can be used on the type of surface you are disinfecting Apply the disinfectant to the surface, leave the disinfectant on the surface long enough to kill the germs. This is called the contact/wet time Contact time should be listed in the manufacturer's directions. The surface should stay wet during the entire contact time to make sure germs are killed
Dedicate medical equipment	

Note: An essential component of manual cleaning is the use of friction

Improving infection prevention in LTCs with ATP machines

By Victor Zindoga, Northern Region IP

To strengthen infection prevention and control practices, the Centers for Disease Control and Prevention (CDC) has partnered with long-term care facilities across Indiana, supplying them with cutting-edge ATP (adenosine triphosphate) machines. This initiative, which started in June 2024 and which will continue through December 2024, aims to enhance the cleanliness and safety of facilities through improved auditing processes. The ATP machines, alongside the swabs provided, will play a key role in ensuring that surfaces are adequately cleaned and disinfected.

The Role of ATP Machines in Infection Control

ATP machines are essential tools for measuring the presence of organic matter that may remain on surfaces after cleaning and disinfecting. ATP testing is a rapid and effective way to assess the cleanliness of environments in real-time, providing immediate feedback to staff about their infection prevention efforts. By using these machines, long-term care facilities can detect areas that may require additional cleaning, helping to prevent the spread of infections, particularly in vulnerable populations.

The CDC's distribution of ATP machines to Indiana's long-term care facilities is part of a broader initiative to bolster infection prevention. The data gathered from the ATP tests will assist in auditing surface cleanliness, ensuring that proper protocols are followed and enabling healthcare teams to make any necessary adjustments to their cleaning processes.



Logistics and Training Support

Each facility received/will receive one or two ATP machines, depending on their census, along with a year's supply of swabs to use with the machines. The swabs, which are a critical part of the process, must be kept refrigerated to maintain their effectiveness. Facilities are advised to remove the ATP machine from the box before refrigerating it, as the entire box is labeled with "refrigerate contents."

Hygiena, the vendor responsible for supplying the ATP machines, <u>will</u> <u>provide training to facility staff</u>. This training will ensure that staff members are equipped with the knowledge and skills to operate the

ATP machines effectively, use the swabs correctly, and interpret the results to improve cleaning procedures.

Swab Supply and Usage

The funding allocated for this initiative is based on an average need for 10 to 20 swabs per facility per week. This should be sufficient to meet the needs of most facilities over the course of one year. However, if a facility uses up its supply of swabs before the year's end, they may purchase additional swabs at their own expense. This flexibility ensures that all facilities, regardless of size or usage patterns, can continue to maintain their infection control practices throughout the year.

The Importance of Infection Prevention in Long-Term Care

Infection prevention and control are vital aspects of patient care, especially in long-term care settings where residents are often elderly or have underlying health conditions that make them more susceptible to infections. The ATP machines, paired with regular swabbing and surface auditing, provide an extra layer of protection for residents and staff. By ensuring that surfaces are free of biomatter, facilities can reduce the risk of healthcare-associated infections (HAIs) and create safer environments for those in their care.

Conclusion

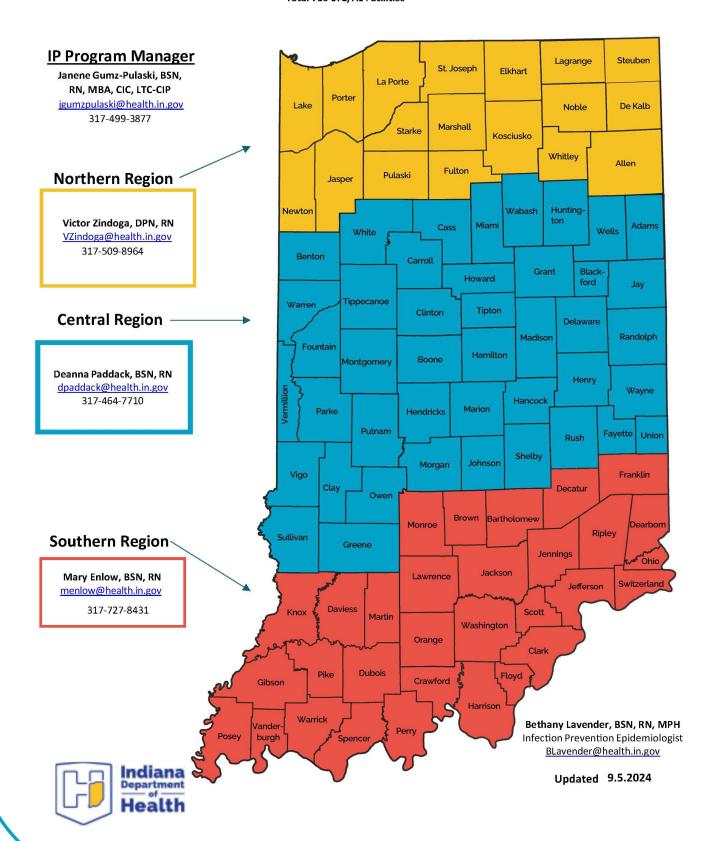
The CDC's initiative to provide ATP machines and training to long-term care facilities across Indiana represents a significant investment in the health and safety of residents and staff. With proper training and the use of ATP machines, these facilities will be better equipped to monitor and improve their infection prevention and control practices. This program not only enhances the ability to detect areas that require more attention but also helps facilities stay ahead of potential outbreaks by maintaining rigorous cleaning standards. The supply of ATP machines and swabs, alongside the expert training provided, will be instrumental in maintaining the health of vulnerable individuals across the state.

IP Team Map

Infection Prevention Team Regions

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Total 739 LTC/AL Facilities



Links and References

If you are viewing this newsletter online, you can open the <u>links</u> throughout by clicking on them. If you are viewing in printed form, the full URLs are below:

MDRO screening through AR Lab Network (ARLN)

- 1. Wisconsin State Laboratory of Hygiene (image and reference) https://www.slh.wisc.edu/
- 2. AR team webpage- https://www.in.gov/health/idepd/healthcare-associated-infections-and-antimicrobial-resistance-epidemiology
- 3. CDC ARLN webpage- https://www.cdc.gov/antimicrobial-resistance-laboratory-networks/php/about/domestic.html

IP Press release schedule changing in 2025

- 1. IDOH's IP webpage- https://www.in.gov/health/idepd/healthcare-associated-infections-and-antimicrobial-resistance-epidemiology/infection-prevention/
- 2. Sign up for the LTC Division Newsletter- https://www.in.gov/health/ltc/contact/newsletters/

What is cohorting?

- 1. Enhanced Barrier precautions FAQs- https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/fags.html
- 2. IDOH HAI-AR team contacts- https://www.in.gov/health/idepd/healthcare-associated-infections-and-antimicrobial-resistance-epidemiology/#:~:text=public%20health%20community.-,Contact,-Trent%20Gulley%2C%20MPH
- 3. IDOH's IP team contacts- https://www.in.gov/health/idepd/healthcare-associated-infections-and-antimicrobial-resistance-epidemiology/infection-prevention/

Improving infection prevention in LTCs with ATP machines

1. Information on training for ATP machines- https://www.in.gov/health/ltc/files/LTC-Newsletter-2024-19-Oct-31-24.pdf

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