

# Reception Room

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# HRD and IDEPC Updates on Infection Control August 2025

# Tennessen Warning

- **The Minnesota Department of Health is hosting this joint regulatory training for providers of long-term care and Health Regulation Division staff.**
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# Welcome

Sarah Grebenc | Federal Executive Operations Manager

Tammy Hale | Infection Control Assessment and Response (ICAR) Unit Supervisor

- Welcome
- Regulations Related to Infection Control for Nursing Homes
- Regulations Related to Infection Control for Hospitals
- Overview of Novel and Targeted MDRO's
- MDH Containment and Response Process
- Scenarios
- Questions





# Regulations Related to Infection Control for Nursing Homes

Becki Wegner | Nurse Evaluator

# Infection Control

- §483.80 Infection Control
- The facility must establish and maintain an infection prevention and control program designed to provide a safe, sanitary, and comfortable environment and to help prevent the development and transmission of communicable diseases and infections.

# Potential Tags

- F880 - Infection prevention and control: IPCP system, policies and procedures, water management, linens, annual review of IPCP
- F881 - Antibiotic Stewardship program
- F882 - Infection Preventionist
- F883 - Influenza, pneumococcal immunizations
- F887 - Covid vaccination status



# Surveyor Investigation (1/2)

Each surveyor is responsible for assessing the facility for breaks in infection control throughout the survey.

One surveyor performs or coordinates the facility task to review for:

- Standard and transmission-based precautions.
- Infection Prevention and Control Program (IPCP) standards, policies, and procedures.
- Infection surveillance.
- Water management.
- Laundry services.
- Antibiotic stewardship program (review at least one resident who is receiving an antibiotic if there are concerns).
- Infection Preventionist.
- Influenza, pneumococcal, and COVID-19 immunizations.

# Surveyor Investigation (2/2)

Sample residents/staff as follows:

- Sample one staff to verify compliance with requirements for educating and offering COVID-19 immunization (select one staff from the actual working schedules for all staff provided during entrance conference).
- Sample three residents on transmission-based precautions (TBP) for purposes of determining compliance with infection prevention and control national standards, as well as resident care, screening, testing, and reporting.
- Sample five residents for influenza, pneumococcal, and COVID-19 immunizations review.

# Observation (1/3)

- Signage for known communicable disease outbreak, if applicable.
- General-environmental cleaning, cleaning and disinfection of personal care equipment.
- Point of care testing (glucometers, INR).
- Appropriate Hand hygiene (alcohol-based hand rub (ABHR) or soap and water).
- Medication administration including insulin pens.
- [Clinical Safety : Hand Hygiene for Healthcare Workers | Clean Hands | CDC](https://www.cdc.gov/clean-hands/hcp/clinical-safety/)  
[\(https://www.cdc.gov/clean-hands/hcp/clinical-safety/\)](https://www.cdc.gov/clean-hands/hcp/clinical-safety/)

## Observation (2/3)

- Resident care
- Standard precautions
- Enhanced Barrier Precautions
- Transmission based precautions



- Handling, storage and transport of linens
- Laundry room



- When should hand hygiene be performed?
- When should hands be washed with soap and water vs ABHS?
- How do you know what PPE needs to be utilized for a specific patient?
- What is a high contact resident care activity?
- Who cleans the common bathing area?
- What is the process for communicating a resident's need for special precautions on transfer or discharge?

# Interview – Infection Preventionist

- What is the process for screening a potential admission for MDROs or other need for special precautions?
- When and to whom should communicable diseases, HAI and potential outbreaks be reported?
- Describe the surveillance process. What are the floor staff's responsibilities?
- Confirmed case of legionellosis since last recert survey?



## Document Review (1/4)

- Infection Prevention and Control Program (IPCP) designed to provide a safe, sanitary, and comfortable environment and to help prevent the development and transmission of communicable diseases and infections.
- Policies and procedures for provision of infection prevention and control based on recognized guidelines and facility assessment.



## Document Review (2/4)

### Infection Surveillance System

- Routine, ongoing, and systematic collection, analysis, interpretation, and dissemination of surveillance data to identify infections, infection risks, and communicable disease outbreaks and to maintain or improve resident health.
- Data collection tool and use of nationally-recognized surveillance criteria.
- Notification: includes identification and use of appropriate precautions on admission and communicating any special precautions on transfer or discharge.

# Document Review (3 /4)

- Reporting: when and whom to report communicable diseases, HAI and potential outbreaks.
- Process: review of staff practices.
- Outcomes.
- CDC Appendix A: Type and duration of precautions recommended for selected infections and conditions.
- [Appendix A | Infection Control | CDC](https://www.cdc.gov/infection-control/hcp/isolation-precautions/appendix-a.html)  
(<https://www.cdc.gov/infection-control/hcp/isolation-precautions/appendix-a.html>)



## Document Review (4/4)

- Water management.
- Antibiotic stewardship program.
- IP at least part time and completed specialized training.
- Influenza, pneumococcal and COVID-19 immunizations.

# Outbreaks

*The facility must know how to recognize and contain infectious disease outbreaks. An outbreak is the occurrence of more cases of disease than expected in a given area or among a specific group of people over a particular period of time. While a single case of a rare infectious condition or one that has serious health implications may or may not constitute an outbreak, facilities should not wait for the definition of an outbreak to act.*



# MDRO Colonization and Infection

Contact precautions for residents infected or colonized with MDRO if:

- Secretions or excretions that are unable to be covered or contained.
- Co-infection with another organism for which contact precautions is recommended.
- For a limited time during the investigation of a suspected or confirmed MDRO outbreak.

Enhanced Barrier Precautions may be indicated when contact precautions do not apply.

[Implementation of PPE Use in Nursing Homes to Prevent Spread of MDROs | Long-Term Care Facilities | CDC \(https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/PPE.html\)](https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/PPE.html)

## Examples – Level 4 IJ (1/2)

- 1) The facility failed to follow standard precautions during the performance of routine testing of blood glucose. The facility reused fingerstick devices for more than one resident. This practice of reusing fingerstick devices for more than one resident created an immediate jeopardy to resident health by potentially exposing residents who required blood glucose testing to the spread of bloodborne infections in the facility.
- 2) The facility failed to investigate, document surveillance of, and implement preventative measures to address an outbreak of gastrointestinal illness among residents in one unit of the facility. As a result, several residents in an adjoining unit became seriously ill with diarrheal illnesses resulting in dehydration.

## Examples – Level 4 IJ (2/2)

3) The facility failed to ensure that its staff demonstrated the proper use of gloves with hand hygiene between residents to prevent the spread of infection. The registered nurse (RN) was observed wearing gloves while providing direct care to a resident who was on contact precautions for an infection with a multidrug-resistant organism. The RN left the room after removing the gloves but did not conduct hand hygiene, went to a second resident and started providing direct care. As a result, the second resident was likely exposed through indirect contact transmission to the MDRO, creating the likelihood of serious injury, serious harm, serious impairment, or death.

## Examples – Level 3 Harm, not IJ

- 1) The facility failed to identify and prevent the spread of infestation when a case of scabies (i.e., a highly contagious skin condition caused by the itch mite *Sarcoptes scabiei*) was not diagnosed or adequately treated, and the resident was not placed on transmission-based precautions. Resident A was admitted with an undiagnosed, reddened, itchy pin-point rash which spread, became infected, and disrupted the resident's sleep. A month later, multiple residents developed a red, pin-point rash with severe itching, which was not present prior to resident A being admitted. The facility failed to identify through assessment and therefore, implement control measures to prevent the transmission of scabies among multiple residents in the facility, causing the residents physical harm. In addition to the physical harm, the residents experienced psychosocial harm due to anxiety and loss of sleep from severe itching and lack of timely diagnosis.



## Examples – Level 2

- 1) The facility failed to ensure that its staff demonstrates proper use of gloves with hand hygiene between residents to prevent the spread of infections. The nurse administered medications to a resident via a gastric tube and while wearing the same gloves proceeded to administer oral medications to another resident. The nurse did not remove the used gloves nor perform hand hygiene between the two residents.
- 2) The facility failed to implement appropriate measures for the transport of contaminated linens. As a result, the potential exists for transmission of organisms from contaminated uniforms to residents during the delivery of care. A nursing assistant was observed removing bed linens contaminated with urine and fecal material without the use of gloves and gown and carrying the contaminated linens against his/her uniform to the laundry bin. The nursing assistant proceeded to assist the resident's roommate with transferring to his/her chair, and his/her uniform made contact with the resident's skin and clothing.



# Regulations Related to Infection Control for Hospitals

Beth Nowling | Nurse Evaluator

# Infection Prevention and Control

## A-0747 §482.42 Condition of Participation: Infection Prevention and Control and Antibiotic Stewardship Programs:

- Active, hospital wide programs for the surveillance, prevention and control of HAI's and other infectious diseases, and for the optimization of antibiotic use through stewardship.
- The programs must demonstrate adherence to nationally recognized infection prevention and control guidelines, as well as best practices for improving antibiotic use where applicable, and for reducing the development and transmission of HAIs and antibiotic-resistant organisms.
- Infection prevention and control problems and antibiotic use issues identified in the programs must be addressed in collaboration with the hospital-wide QAPI.

# Regulations 1/8

- **A-0748:** Standard: Infection Prevention and control program organization and policies.
  - The hospital must demonstrate that an individual(s), who is qualified through education, training, experience, or certification, is appointed by the governing body as the infection preventionist/control professional responsible for the infection prevention and control program, and that appointment is based on the recommendation of medical staff and nursing leadership.
- **A-0749:** The infection prevention and control program, employs methods for preventing and controlling the transmission of infections within the hospital and between the hospital and other institutions/settings.
- **A-0750:** The infection prevention and control program includes surveillance, prevention and control of HAI's, including maintaining a clean and sanitary environment to avoid sources and transmission of infections, and addresses any infection control issues identified by public health authorities.

# Regulations 2/8

- **A-0751:** The infection prevention and control program reflects the scope and complexity of the hospital services provided.
- **A-0770:** Standard: Leadership responsibilities.
  - Systems are in place and operational for the tracking for all infection surveillance, prevention, and control and antibiotic use activities, in order to demonstrate the implementation, success and sustainability of such activities.
- **A-0771:** The governing body must ensure:
  - All HAI's and other infectious diseases identified by the infection prevention and control program as well as antibiotic use issues identified by the antibiotic stewardship program are addressed in collaboration with hospital QAPI leadership.

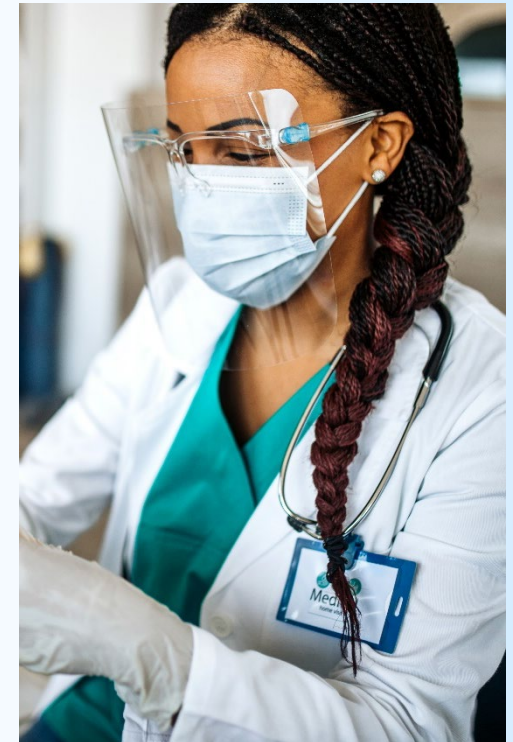
# Regulations 3/8

- **A-0772:** Standard: Leadership responsibilities.
  - The infection preventionist is responsible for the development and implementation of hospital-wide infection surveillance, prevention, and control policies and procedures that adhere to nationally recognized guidelines.
- **A-0773:** The preventionist is responsible for all documentation, written or electronic, of the infection prevention and control program and its surveillance, prevention, and control activities.
- **A-0774:** The preventionist is responsible for communication and collaboration with the hospitals QAPI program.



# Regulations 4/8

- A-0775: The preventionist is responsible for competency-based training and education of hospital personnel providing contracted services in the hospital, on the practical applications of infection prevention and control guidelines, policies, and procedures.
- A-0776: The preventionist is responsible for the prevention and control HAIs, including auditing of adherence to infection prevention and control policies and procedures by hospital personnel.
- A-0777: The preventionist is responsible for communication in collaboration with the antibiotic stewardship program.



# Regulations 5/8

- **A-0778:** Standard: Leadership responsibilities.
  - The leader of the antibiotic stewardship program is responsible for the development and implementation of a hospital –wide antibiotic stewardship program, based on nationally recognized guidelines, to monitor and improve the use of antibiotics.
- **A-0779:** The leader is responsible for all documentation of antibiotic stewardship program activities.
- **A-0780:** The leader is responsible for communication and collaboration with medical staff, nursing, and pharmacy leadership, the infection prevention and control and QAPI programs on antibiotic use issues.

# Regulations 6/8

- **A-0781:** The leader of the antibiotic stewardship program is responsible for competency - based training and education of hospital personnel and staff, including med staff, and personnel providing contracted services in the hospital on the practical applications of antibiotic stewardship guidelines, policies and procedures.
- **A-0785:** Standard: Unified and integrated infection prevention and control and antibiotic stewardship programs for multi-hospital systems.
  - If the hospital is part of a hospital system of multiple separately certified hospitals using a system governing body that is legally responsible for the conduct of two or more hospitals, the system governing body can elect to have a unified and integrated infection prevention and control and antibiotic stewardship programs for all of its member hospitals after determining that such a decision is in accordance with all state and local laws. The system governing body is responsible for accountable for ensuring that each of its separately certified hospitals meets all of the requirements.

# Regulations 7/8

- **A-0786:** Standard: Unified and integrated infection prevention and control and antibiotic stewardship programs for multi-hospital systems.
  - The unified and integrated infection prevention and control and antibiotic stewardship programs are established in a manner that takes into account each member hospitals unique circumstances and any significant differences in patient populations and services offered in each hospital.
- **A-0787:** The unified and integrated infection prevention and control and antibiotic stewardship programs establish and implement policies and procedures to ensure that the needs and concerns of each of its separately certified hospitals, regardless of practice or location, are given due consideration.

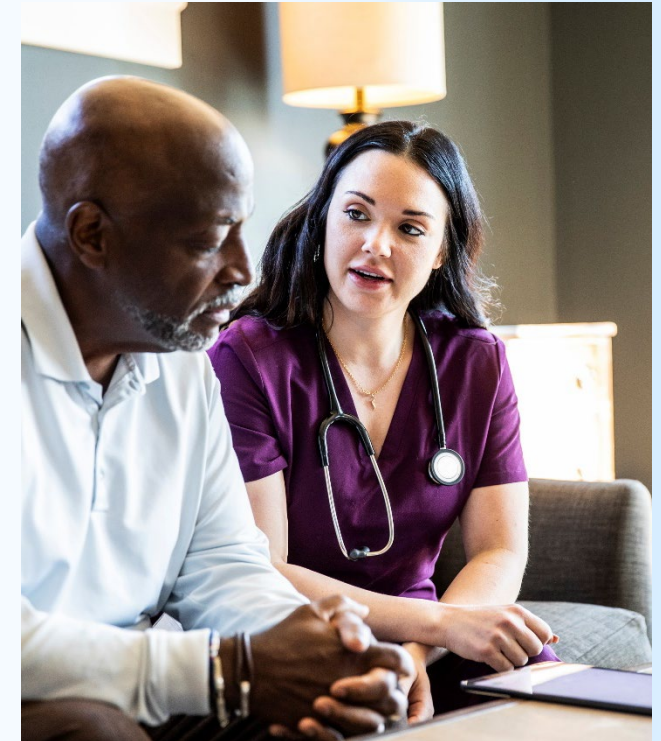
# Regulation 8/8

- **A-0788:** The unified and integrated infection prevention and control and antibiotic stewardship programs have mechanisms in place to ensure that issues localized to particular hospitals are duly considered and addressed.
- **A-0789:** A qualified individual with expertise in infection prevention and control has been designated at the hospital as responsible for communicating to hospital staff with the unified infection prevention and control and antibiotic stewardship programs, for implementing and maintaining the policies and procedures governing infection prevention and control as directed by the programs, and for providing education and training on the practical applications of infection prevention and control and antibiotic stewardship to hospital staff.

# Surveying the CoP Infection Prevention - Hospital

One surveyor will be assigned as lead of the investigation; each surveyor is responsible for assessing the facility and patient care areas.

- Complex investigation requires coordination with team and department heads.
- Observation, interview and document review will be conducted.
- Encompasses all departments providing patient services which include CoP's Emergency services, Surgical Services, Nursing, Laboratory, Radiology, Nuclear Medicine, Physical Plant/Environment, Food/Dietetic services, Respiratory Services, Outpatient Services.





# Survey Process - Lead

The lead for infection control will be responsible for:

- Ensuring oversight, involvement and approval of Governing Body and Med Staff.
- QAPI projects include all departments providing patient services and overall hospital surveillance.
- Involvement of the Hospitals Infection Preventionist, job description including qualifications, training and education needed.
- Interview and coordination with the hospitals Infection Preventionist.
- Policy and Procedure of the hospitals Infection Prevention and Control and Antibiotic Stewardship.

# Survey Process – Patient Observations

Observations will be conducted by all members of the team.

Team lead will request a daily list of patients with the following:

- Catheter
- On a ventilator
- Central venous catheter
- Isolation precautions
- Receiving dressing changes



# Survey Process – Service Area Observations

Observations are conducted in all patient service areas:

- Hand hygiene
- Signage for known communicable diseases
- General - environmental cleanliness, disinfection, sterilization
- Point of care testing
- Medication/IVF administration
- Sterile and non-sterile procedures
- Negative pressure spaces
- Pharmaceutical compounding

# Survey Process - Observations

Observations continued...

- Treatments
- Resident care
- Donning/doffing PPE
- Standard precautions
- Enhanced barrier precautions
- Transmission based precautions
- Patient room and surgical suite turnover
- Laundry services



# Survey Process - Interviews

Interviews will be conducted with infection preventionist, direct care staff, ancillary services, leadership, and patients.

- When and where hand hygiene will be performed.
- What PPE needs to be utilized for patients requiring precautions.
- Cleaning and sanitization of patient care areas.
- Education required.
- Process for communicating need for special precautions.

# Survey Process – Infection Control Lead

Infection Control Lead will meet with the Hospital's Infection Preventionist

- Review hospital surveillance, ensuring there is evidence of active surveillance.
- Communicable diseases, HAI and outbreak reporting, when and who is responsible.
- Review program in its entirety.
- Education provided to staff, who is responsible and frequency.
- Governing body/med staff involvement bylaws.
- QAPI program.
- Identification and communication of communicable diseases, MDRO's and antibiotic use.
- Antibiotic Stewardship program.

# Document Review

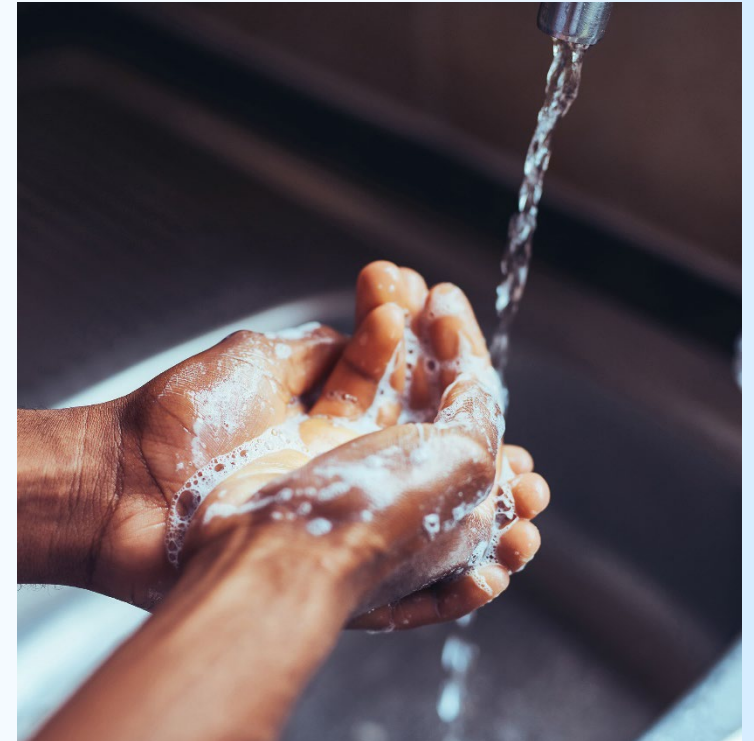
Requests for policies and procedures upon entrance and relevant to:

- Construction, renovation, maintenance, demolition and repair at the hospital.
- Hospital surveillance program.
- Prevention, identifying, reporting, investigating, and controlling infections and communicable disease of patients and hospital staff, including contract workers and volunteers.
- Airborne Infection Control Isolation room.
- Minimizing the risk of transmission and preventing the development of multidrug resistant organisms (MDROs).
- Job – Specific training on hospital infection control practices upon hire and ongoing training needs.



# Policies & Procedures

- TB exposure plan and TB screening and testing process for staff.
- Hand hygiene.
- Isolation procedures .
- High level disinfection of reusable instruments and devices (sterile processing).
- Sterilization of reusable instruments and devices.
- Single use devices.



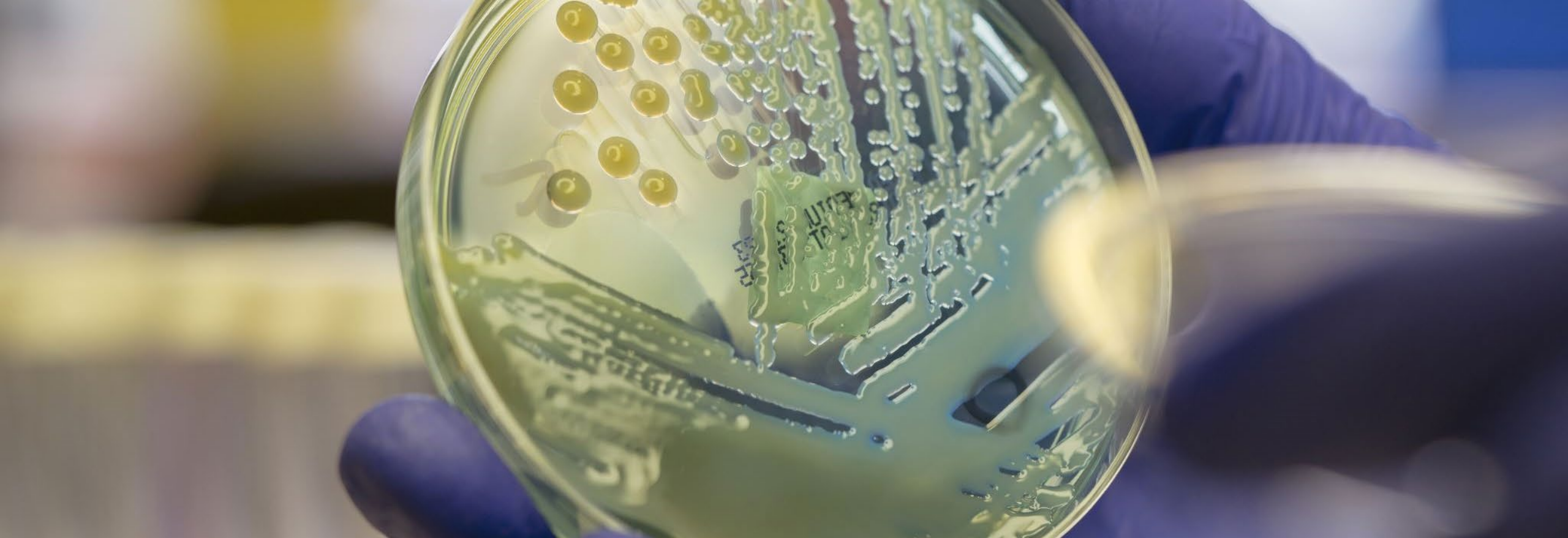
# Survey Process

## Document review continued:

- Patient medical records
- Bylaws for Governing body and Medical staff
- Staff personnel records

## Infection Control committee meeting minutes:

- Responsibilities of its members
- Will review last 12 months

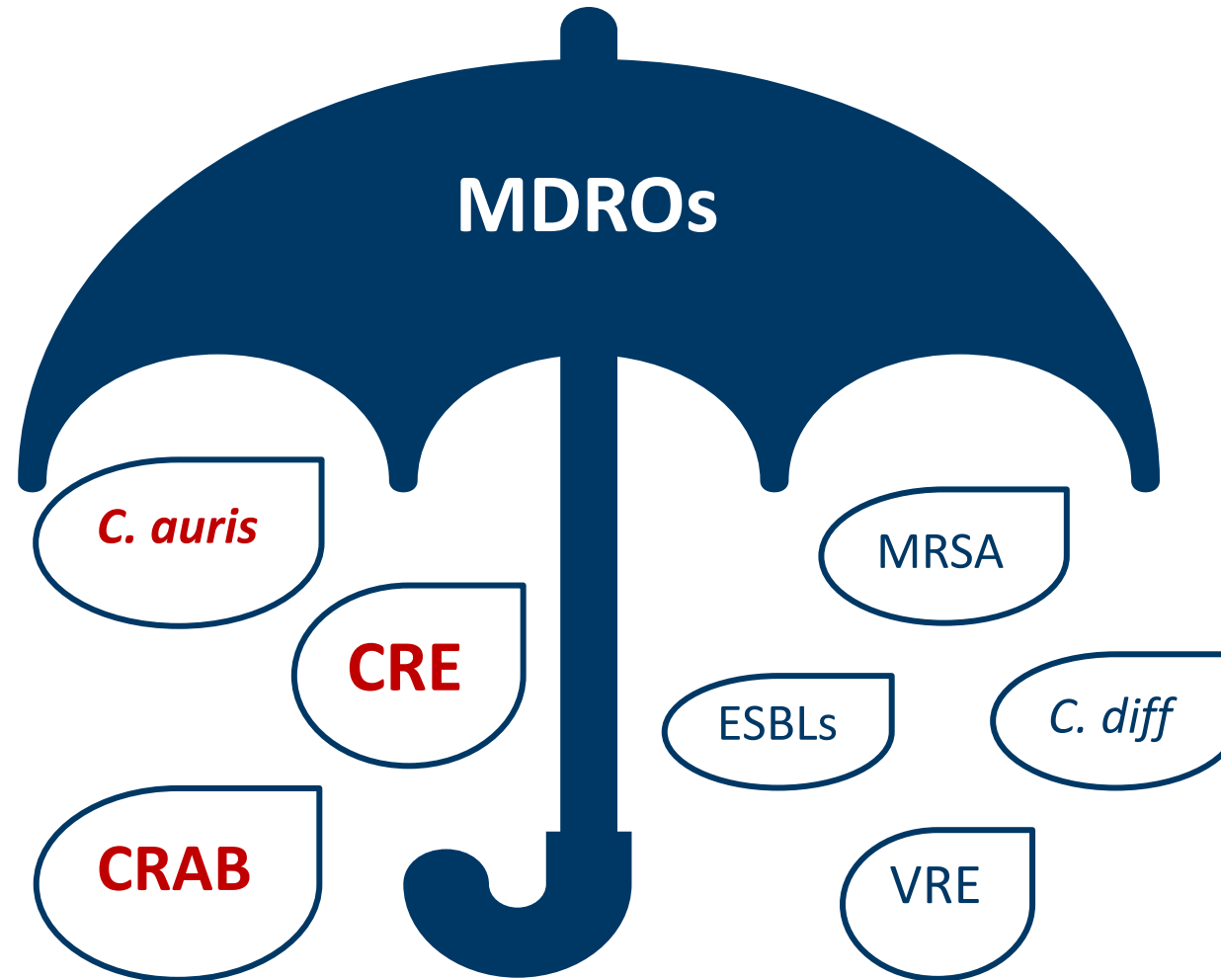


## Overview of Novel and Targeted MDRO's

Tara Suhs | HAI/AR Surveillance Unit Epidemiologist

# What are MDROs?

- *Candida auris* (*C. auris*)
- Carbapenem Resistant Organisms (CROs)
  - Carbapenem-resistant *Enterobacterales* (CRE)
  - Carbapenem-resistant *Acinetobacter baumannii* (CRAB)



- Methicillin-resistant *Staphylococcus aureus* (MRSA)
- Vancomycin-resistant Enterococci (VRE)
- Extended-spectrum beta-lactamases (ESBLs)
- *Clostridioides difficile* (*C. diff*)

# Novel and Targeted MDROs

## DRUG-RESISTANT **CANDIDA AURIS**

THREAT LEVEL **URGENT**



## **CRAB** Carbapenem-resistant *Acinetobacter baumannii*

An Urgent Public Health Threat 

## **CRE** Carbapenem-resistant Enterobacterales

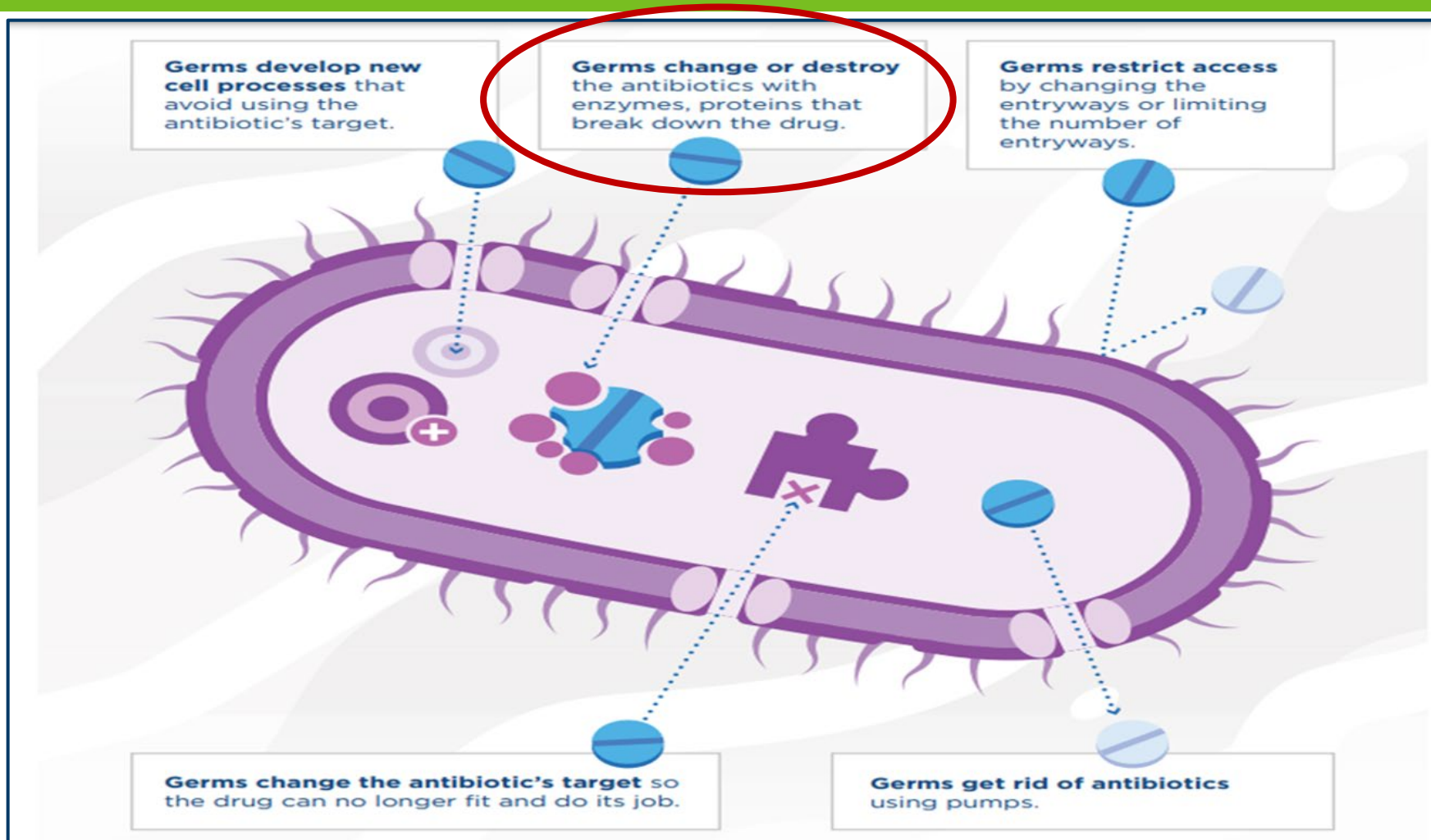
An Urgent Public Health Threat 

*C.auris* and Carbapenem Resistant Organisms (CROs) are considered an **urgent public health threat**.

- Limited antibiotic treatment options.
- Can spread quickly and silently.
- Can transfer to other bacteria.
- Can be associated with high mortality.
- Early identification and IPC measures are crucial.

- Carbapenems are a broad-spectrum antibiotic reserved to treat serious multidrug-resistant infections.
  - Examples: Doripenem, Ertapenem, Imipenem, Meropenem
- These antibiotics are considered antibiotics of last resort to treat infections and often prescribed after other antibiotics have failed to treat infections.





CDC | 2019 Antibiotic Resistance Threats Report

(<https://www.cdc.gov/antimicrobial-resistance/data-research/threats/index.html>)

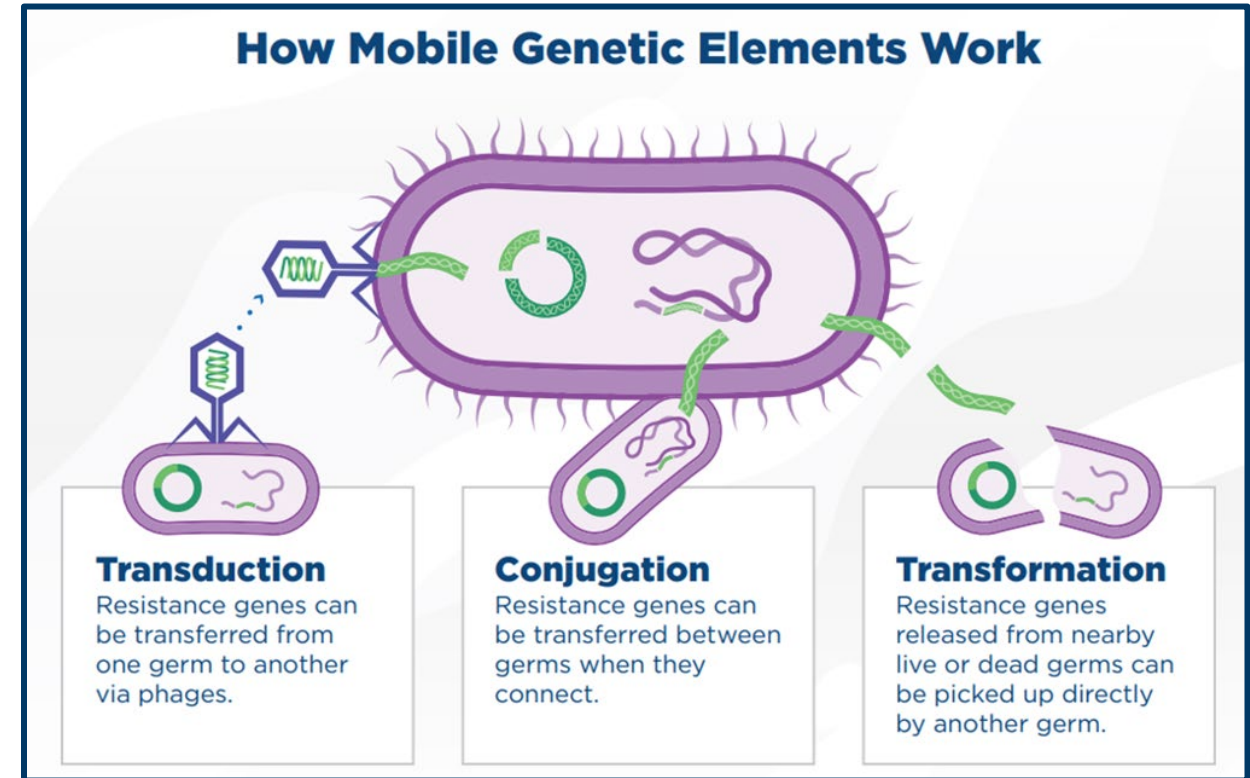


- Most common pathogenic organisms are gram negative bacteria in the Enterobacterales Order and *Acinetobacter calcoaceticus-baumannii* complex.
- When these bacteria develop resistance to the group of antibiotics called carbapenems, they are called **Carbapenem-resistant Enterobacterales (CRE)** and **Carbapenem-resistant A. baumannii (CRAB)**.
  - Common Enterobacterales species: *Klebsiella spp.*, *Escherichia coli*, *Enterobacter spp.*
- CRE colonizes gastrointestinal tract, where as CRAB colonizes respiratory, skin, open wounds, and GI.
- Cause infections in both healthcare and community settings.
- Can live the surface environment for days or weeks.

# What is CP-CRO?

“**CP**” is for CARBAPENEMASE PRODUCING

- Some carbapenem resistant bacteria can make enzymes called carbapenemases that break down carbapenem antibiotics leading to antibiotic resistance.
- These bacteria encode the genes for carbapenemases on a mobile genetic element, plasmids, that can transfer from one bacteria to another, even across species.
- Common genes are KPC, NDM, OXA

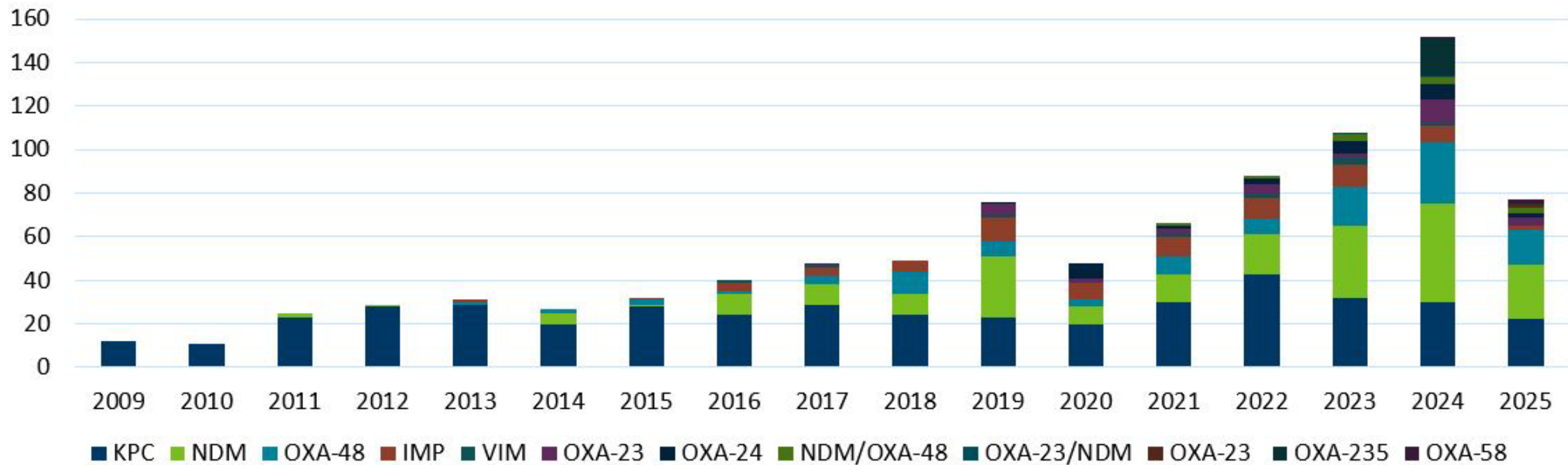


[CDC | 2019 Antibiotic Resistance Threats Report](https://www.cdc.gov/antimicrobial-resistance/data-research/threats/index.html)

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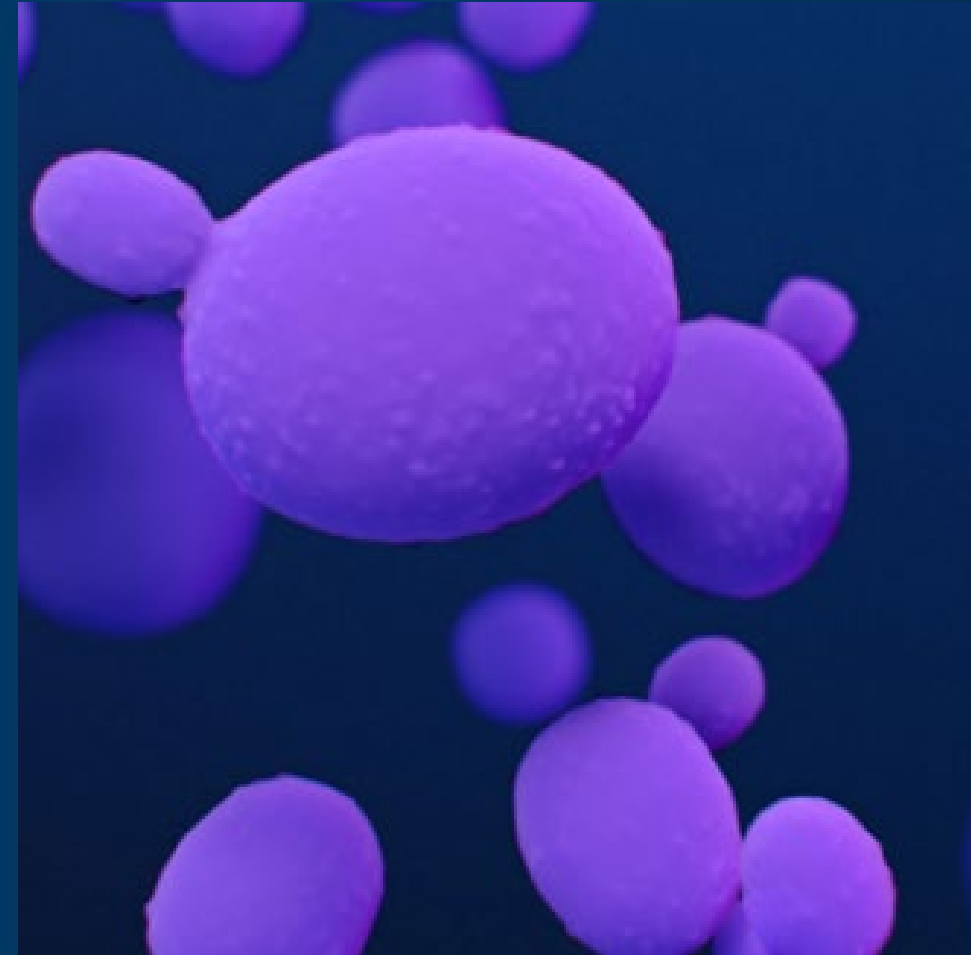
# CPOs in Minnesota

**Number of Patients with Carbapenemase-producing  
Enterobacterales,  
*Pseudomonas aeruginosa*, and *Acinetobacter baumannii***

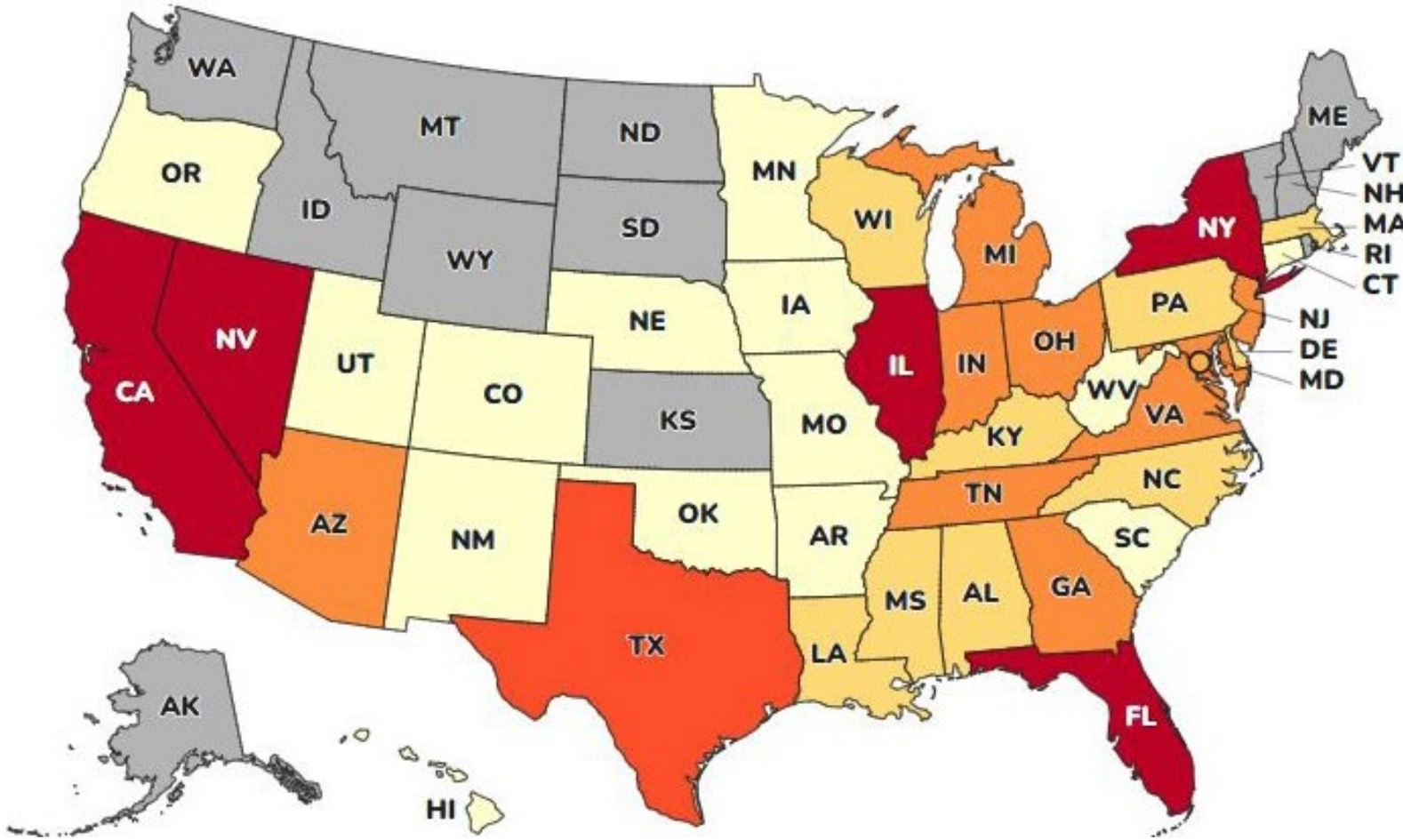


# *Candida auris*

- Multidrug-resistant fungus.
  - May cause invasive infections.
- Can cause outbreaks in healthcare.
  - MN low prevalence state.
  - Other states have higher prevalence.
- Can live on skin for long periods of time.
- Difficult to eliminate from equipment and the environment, need EPA List P grade disinfectant.



# 2023 National *C. auris* Epidemiology – Tara



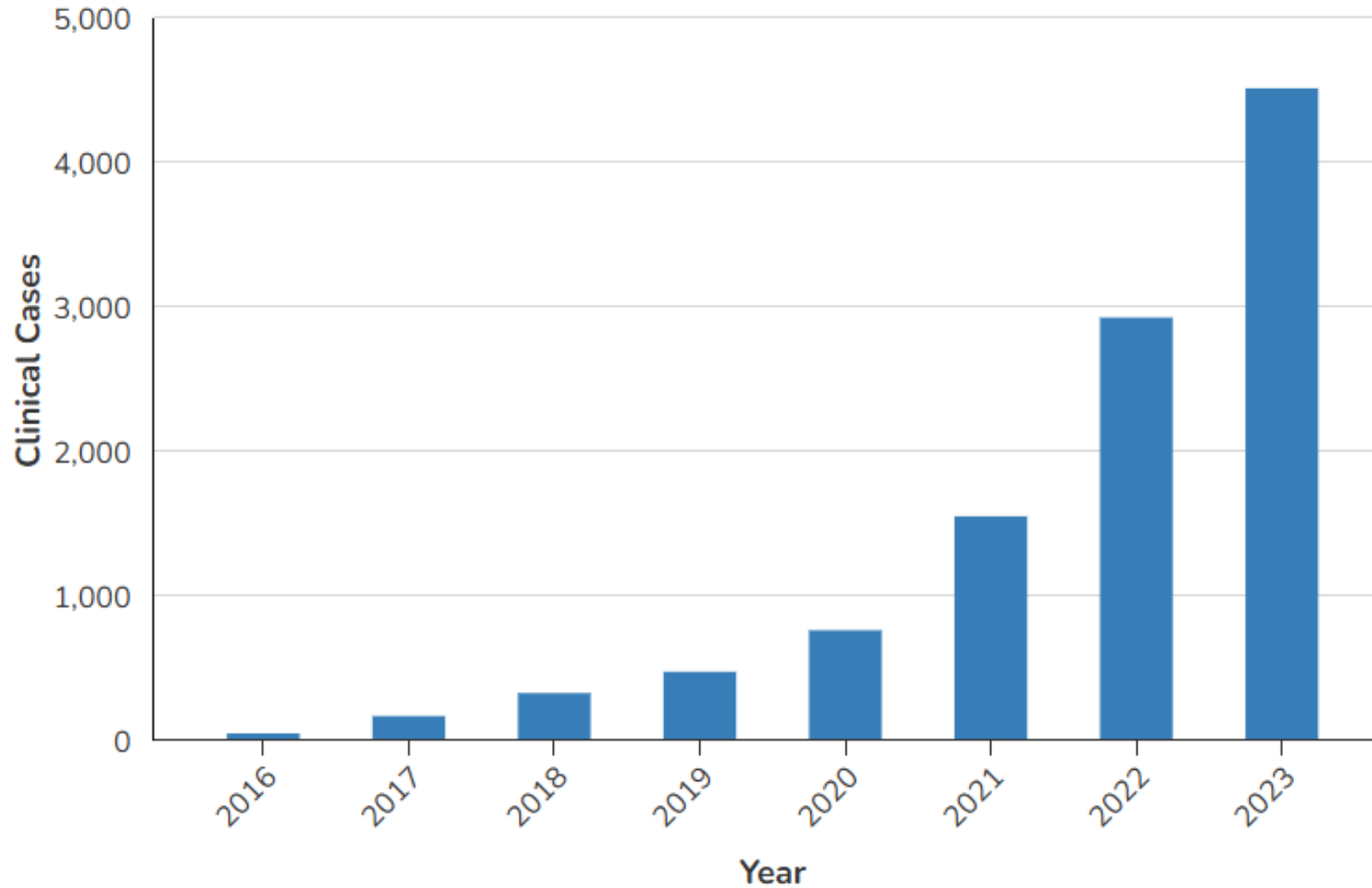
From 2016-2023, there have been 10,788 clinical cases. There were an additional 22,931 colonized cases not shown on the map. There were 9 clinical cases from 2013-2015 that were reported retrospectively.

- No new clinical cases
- 1 to 10
- 11 to 50
- 51 to 100
- 101 to 500
- 501 to 1000
- > 1000

[CDC | Tracking \*C. auris\*](https://www.cdc.gov/candida-auris/tracking-c-auris/)  
(<https://www.cdc.gov/candida-auris/tracking-c-auris/>)

# Clinical Cases in the US

National Clinical Cases Reported Over Time



[CDC | Tracking  
\*C. auris\*  
\(https://www.cdc  
.gov/candida-  
auris/tracking-c-  
auris/\)](https://www.cdc.gov/candida-auris/tracking-c-auris/)



# Containment of CPOs and C. auris

**A containment response is the initial response to the identification of targeted MDROs. Minnesota Department of Health follows CDC MDRO Containment Guidance.**

5 goals of a containment response:

1. **Identify** affected patients.
2. **Ensure appropriate control measures** are promptly implemented to limit further spread.
3. **Determine** if **transmission** within a healthcare facility and dissemination to other facilities are occurring.
4. **Characterize** novel organisms or mechanisms to guide further response actions, patient management, and future responses.
5. **Coordinate response with ongoing prevention activities** (e.g., infection prevention and control improvement initiatives, routine colonization screening, and improved interfacility communication) in the region.





# MDH Containment Response Process

Tammy Hale, MSN, RN, CIC, FAPIC | ICAR Unit Supervisor

# MDH Containment Response Staff

- Infectious Disease Epidemiology, Prevention, and Control (IDEPC) Division:
  - [MDH Organizational Chart \(PDF\) \(https://www.health.state.mn.us/about/orgchart.pdf\)](https://www.health.state.mn.us/about/orgchart.pdf)
  - Non-regulatory
- Healthcare-Associated Infection/Antimicrobial Resistance (HAI/AR) Section – Leads containment investigation of novel and emerging MDROs.
  - HAI/AR Surveillance Unit
  - Infection Control Assessment and Response (ICAR) Unit
- Support from:
  - Public Health Lab (PHL)
  - Medical Specialists
  - CDC Subject Matter Experts (as needed)

# Guide for Facility Leadership

## *New: Containing the Spread of Multidrug-Resistant Organisms: A Guide for Facility Leadership*

- Review serious threats of novel and targeted organisms.
- Provides references for more in-depth review.
- Outlines MDH roles and support.
- Provides facility leadership with a checklist.
  - Clarification of points of contact for prompt communication.
  - Allocate time and resources for colonization screening and ICAR assessment.

Containment responses aim to support facilities without involving regulatory authorities. MDH monitors containment compliance closely. Significant delays or safety concerns may result in notifying MDH Health Regulation Division to ensure resident/patient safety.

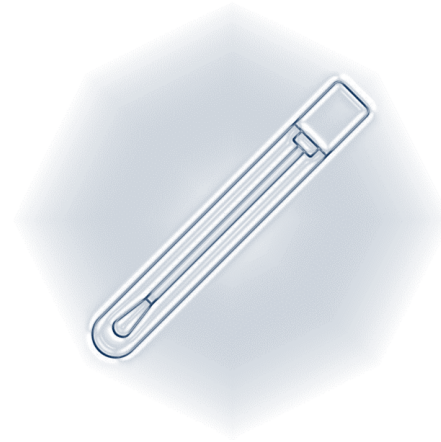
# Key Components of Containment Response



**Prompt communication**  
between the facility  
and MDH to collect  
data and determine  
next steps



**Infection prevention  
and control (IPC)**  
implementation



**Colonization or Point  
Prevalence Surveys  
(PPS)** to identify  
transmission to at-risk  
patients/residents



**ICAR Assessment**

# MDH Assistance - Containment

## **Facility notification:**

- MDH notifies impacted facilities

## **Discussion with:**

- Address immediate concerns
- Provide educational resources

## **PPS Colonization Screening:**

- Provide free testing materials
- Free specimen testing conducted at PHL, results 1-3 days

## **ICAR visit:**

- Assess the facilities infection prevention and control practices

# Notification of Case

- MDH receives notification of a positive case by the reporting facility.
- Help foster inter-facility communication
  - Notification of upstream facilities.
    - Inpatient stay in the 30 days before + specimen
  - Notification downstream healthcare facilities
    - Receiving MDRO patient



[Reportable Disease Poster \(PDF\)](https://www.health.state.mn.us/diseases/reportable/rule/poster.pdf)

<https://www.health.state.mn.us/diseases/reportable/rule/poster.pdf>



# Why do Colonization Screening?

**Transmission can occur from infected and /or colonized patients.**

- Identifying colonized patients or residents allows for implementation of infection control measures.
- Identifying colonized patients or residents allows for appropriate medical care.

**In outbreak situations:**

- Determine the scope of the outbreak.
- Determine if interventions are effective and if the outbreak is over through repeat testing.

***Testing is free through the MDH Public Health Lab  
and results are available quickly!***

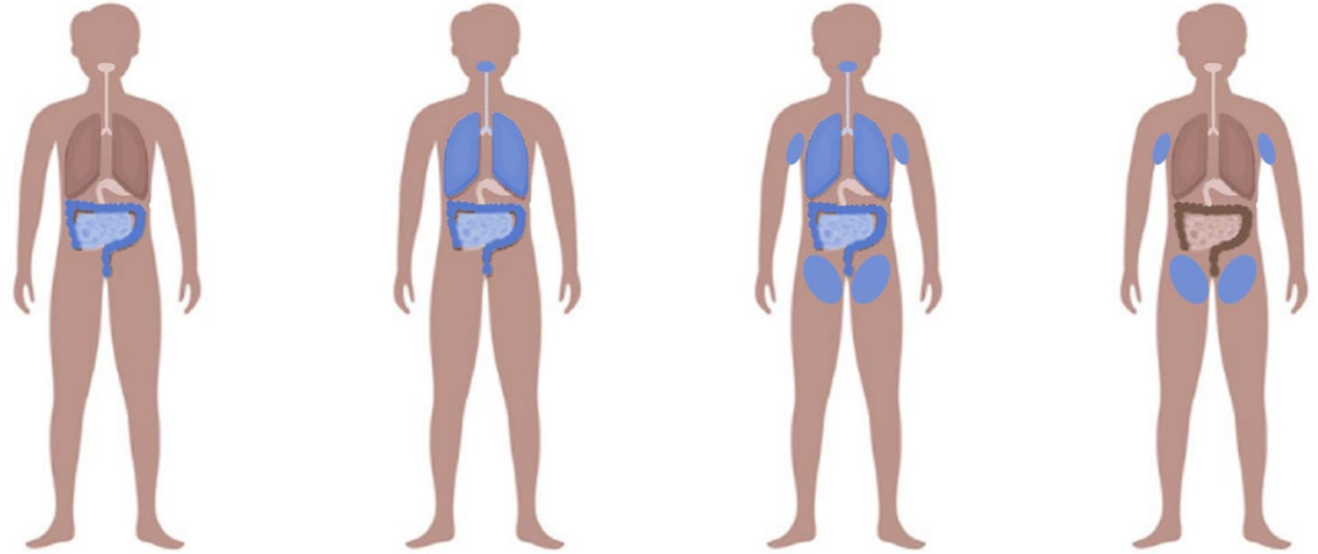
# Screening Identifies Spread

- These pathogens can spread silently through colonization (no signs/symptoms).
- Colonization screening allows for the detection of colonized patients that facilities were previously unaware.
  - Testing is done at MDH PHL
  - Free
  - Resident education materials



# How does colonization screening work?

- Patients should be educated about screening.
- Patients should provide verbal consent.
- Colonization screening is for surveillance purposes only.



Body Sites for Screening	CRE	CRPA	CRAB	C. auris
Gastrointestinal - rectal	X	X	X	
Respiratory – sputum or tracheal aspirate		X	X	
Skin – axilla/groin			X	X
Wound-wound			X	

# ICAR Unit Assistance

MDH Infection Control Assessment and Response (ICAR) Program  
(<https://www.health.state.mn.us/facilities/patientsafety/infectioncontrol/icar>)

- Two onsite and two remote ICAR visits.
  - Coordinated with colonization screening/PPS.
  - May involve direct observations (e.g., wound care).
- Standardized assessment tool developed by CDC.
- No cost to the facility.

The logo for the Infection Control Assessment and Response Program (ICAR). It features the text "Infection Control Assessment and Response Program" in a black, sans-serif font on a light blue background. To the right of this text is a dark blue vertical bar with the letters "ICAR" in white, bold, sans-serif font.

*Infection Control Assessment  
and Response Program* **ICAR**

## ICAR Assessment Tool for General Infection Prevention and Control (IPC) Across Settings

This comprehensive tool is intended to help assess IPC practices among Minnesota acute care/critical access hospitals, long-term care, and outpatient/ambulatory settings.

### Instructions

This assessment should be completed by someone who is responsible for infection prevention and control (e.g., Designated Infection Control Officer or DICO). In addition to facility demographics, there are ten modules within the assessment.

To enroll, submit the secure online assessment tool found on [Enroll in ICAR \(www.health.state.mn.us/facilities/patientsafety/infectioncontrol/icar/enroll.html\)](http://www.health.state.mn.us/facilities/patientsafety/infectioncontrol/icar/enroll.html). For more flexibility, you may want to print this PDF assessment tool, fill it out by hand at your convenience, and then enter your data into the online tool.

Please note that once you start an online assessment, the system assigns you a unique access code. If you need to exit and return to the assessment, you will need to log in with your unique access code.

Please contact the MDH-ICAR team at [health.icar@state.mn.us](mailto:health.icar@state.mn.us) with any questions or concerns.

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This assessment tool was adapted with permission from the Centers for Disease Control and Prevention.

# Primary Components Assessed

## Basic principles of IPC:

- Hand hygiene
- Precautions – Personal Protective Equipment (PPE) use
  - Contact or Enhanced Barrier
- Cleaning & disinfection
  - Environmental, shared equipment
- Education
  - Staff
  - Residents/Patients/Family
- Risk from water
- Auditing of IPC practices

# Continued ICAR support

- Customized facility-specific action plan.
  - Identify priorities.
  - Provide recommendations.
  - Resources (e.g., Project Firstline).
- Collaborate with facility leadership.
- Provide ongoing infection prevention and control support.
  - Email & phone calls.



# Call to Action

- Incidence of CPO's and *C. auris* will continue to increase in MN and nationally.
- Facilities should anticipate providing care to patients/residents with known or suspected CPOs or *C. auris*.
  - MDH hearing of reluctance to accept colonized patients/residents who need care.
  - Care of colonized residents can safely occur with IPC measures.
- How can MN facilities feel confident to provide necessary care to patients/residents?
  - Investment in infection prevention and control program.
  - Preparing ahead of time before you have a case in your facility (e.g., education).



# CPO

## Carbapenemase-Producing Organism

### What is a carbapenemase-producing organism (CPO) and why is it important?

CPOs are **a type of bacteria that produce an enzyme that inactivates carbapenem antibiotics** (the antibiotic designed to treat them), which significantly limits treatment options.

They can also **easily share their antibiotic resistance** to other bacteria and can cause serious infections associated with high mortality. Examples include wound infections, bloodstream infections, and urinary tract infections.

CPOs **can spread quickly through health care settings** and transmission can occur among patients/residents/clients who may be colonized with a CPO.

#### CARBAPENEMASE EXAMPLES

- *Klebsiella Pneumoniae* Carbapenemase (KPC)
- New Delhi metallo-B-lactamase (NDM)
- Verona-intergron-mediated Carbapenemase (VIM)
- Imipenemase Metallo-B-lactamase (IMP)
- Oxacillinase-48-like beta-lactamase (OXA-48)\*
- Carbapenemase producing Carbapenem-resistant *Acinetobacter baumannii* (CP-CRAB)

\*Refer to page 3 for additional detail

**Colonization** is when an organism is found on or in the body but not causing symptoms.

Patients/residents/clients may remain colonized with a CPO for an unspecified time (e.g., years).



#### Why does colonization matter?

Those colonized by a CPO can be a source of spread to others. They are also at a higher risk of developing a CPO infection than those who are not colonized. There are no signs or symptoms of colonization. Without testing, CPO colonization can go undetected and contribute to silent spread of resistant bacteria.

#### Who is most at risk?

Those who have:

- Recent admission to a nursing home, intensive care unit, or received complex medical care
- Immunocompromised conditions, wounds, or medical devices that stay in the body
- Had long courses of antibiotics
- Anyone admitted to a health care facility or had a medical procedure outside the U.S.

#### Pathways (how is it transmitted)

##### Touch

- Direct person-to-person contact (contact with contaminated hands, wounds, body fluids, or stool)
- Indirect contact with contaminated surfaces, equipment, and the environment
- Tasks involving complex medical care or high-contact care activities
- Examples may include toileting, bathing, wound care, ventilator, and catheter care

##### Environmental sources

- Premise plumbing such as sink drains, shower drains, and toilets can be important reservoirs contributing to CPO transmission

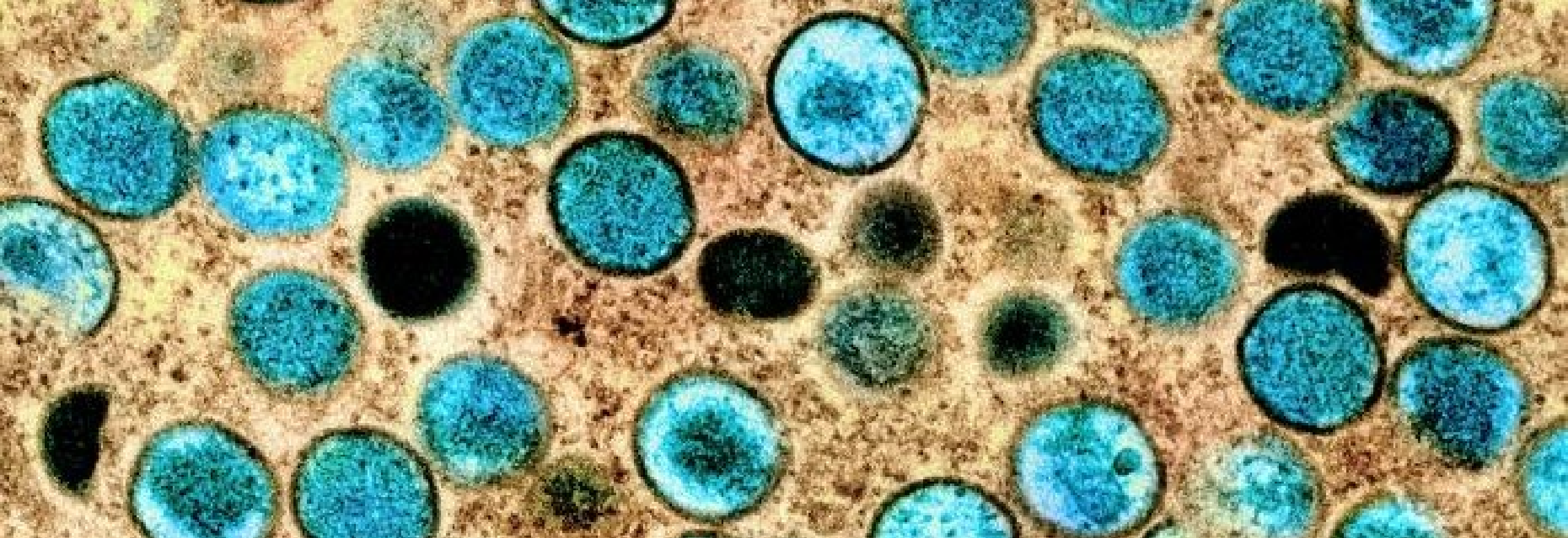
# How can MDH help your facility prepare?

## Educational Resources

- Project Firstline
- [Project Firstline Training and Resources \(https://www.health.state.mn.us/facilities/patientsafety/infectioncontrol/pfl/training/index.html\)](https://www.health.state.mn.us/facilities/patientsafety/infectioncontrol/pfl/training/index.html)
- Patient/resident handouts

## ICAR

- MDRO preventive onsite visits
- Consultative calls
- Answer questions via email



# Scenarios

# Scenario #1 – Facility A

- Mr. Allen was admitted to your facility 15 days ago. He recently moved to MN from Florida. His health was declining, and his son wanted him closer to help manage his care.
- Mr. Allen was recently in a health care facility experiencing an outbreak of *Candida auris*.
- Prior to his move to MN, he underwent screening, and his results were positive.

## Scenario #1 continued

- No communication regarding *C. auris* screening in Florida occurred, and therefore no precautions have been implemented.
- FLDOH notified MDH. An MDH epidemiologist called to speak with the Infection Preventionist (IP).
- Colonization screening of other patients/residents on the unit is recommended as no precautions have been implemented.

# Scenario #1 Overview

- *Candida auris* is:
  - A fungus that is resistant to multiple antifungals.
  - Can cause difficult or impossible to treat infections.
  - Can be spread to other patients.
- Recommended IPC Measures
  - Contact or Enhanced Barrier Precautions are necessary to prevent spread.
  - Recommend private room/private bathroom.
  - Certain disinfectants are not effective for *C. auris*.
- What questions would you have if this occurred in your facility?
  - How would you respond?
  - What actions would prevent the spread?

# Containment Response Timeline (1/3)

## Initial Notification – 2 days

- MDH Epidemiologist left a voice message for the IP on Monday, no response Day 1. Day 2 (Tuesday), a second message was left, the IP returned a call in the afternoon. The IP shared that he is only part-time.

## Initial Call – Day 3

- On Wednesday, the IP is the only team member on the initial MDH consult call. The IP explained that he is overwhelmed, unsure how he is going to get everything done as he has been pulled to work the floor more days than usual.

## Delayed PPS

- The IP needs corporate approval prior to colonization screening. The IP tried to explain why screening is needed to administration and medical director but had difficulty explaining the containment response recommendations and asks for another call with MDH. Three patients/residents were discharged from the unit.

# Containment Response Timeline (2/3)

## Call with MDH – Day 4

- A call is coordinated with MDH to explain the importance of colonization screening to administration and the Medical Director. The facility agrees to conduct colonization screening the following week.

## Colonization Screening – 10 days later (Wednesday)

- Colonization screening occurred on 80% of the patients/residents on the unit. Some were discharged, some refused. Patient/resident education was brief. Several of the specimens were incorrectly labeled.

## Onsite ICAR visit declined

- Despite multiple offers to provide an onsite ICAR visit, facility administration declined offers for infection prevention and control support.

## Colonization screening results

- Positive result for 2 patients/residents
- Additional colonization screening recommended –expanded



# Containment Response Timeline (3/3)

## **Follow-up to discuss additional cases and ICAR assessment:**

- MDH reviewed the 2 additional positive patient/resident results.
- Facility leadership approved an onsite ICAR assessment (occurred 15 days after initial notification). The ICAR Nurse Specialist observed use of an environmental cleaning and disinfection with a non-List P product. This product is ineffective against *C. auris*. Recommendations for List P Product are reviewed.
- Staff on patient/resident care units needed education on cleaning and disinfecting of equipment and dedicating equipment when able.
- The action plan was sent. During a follow-up call the IP had delays in reviewing action plan – still needed to fully review 2 weeks after the onsite visit. IP shared that planning to leave position soon due to high amount of stress.

# Scenario #1 Summary

## Areas for improvement:

- Staff lacked education of *C. auris* and that FL is a high-risk state.
- IP part-time, overwhelmed, and had delayed communication with MDH. Very few staff present on calls.
- Delays in colonization screening.
- Multiple meetings to explain rationale and needed corporate approval.
- Multiple patients/residents discharged before screening (Where are they now?).
- Onsite ICAR assessment initially declined – continued to use of product not effective for *C. auris* on unit.
- Delays in implementing MDH IPC recommendations. IP turnover.

## Scenario #2 – Facility B

- Your facility is notified that a patient/resident, Mrs. Apple, had previously tested positive for New Delhi metallo-beta-lactamase (NDM)-producing carbapenem-resistant Enterobacterales (CRE).
- She was admitted 3 weeks ago; no precautions have been implemented as your facility was unaware of this lab result.
- This is a rare organism in MN. It is reportable and a staff member from MDH called to speak with your Infection Preventionist (IP).
- It is recommended that colonization screening be done on other residents/patients on the same unit.

## Scenario #2 Overview

- NDM-producing CRE are:
  - Bacteria that are resistant to many antibiotics.
  - Can cause difficult or impossible to treat infections.
  - Can be spread to other patients/residents.
  - Contact Precautions or Enhanced Barrier Precautions necessary to prevent spread.
  - Recommend private room/private bathroom.
- What questions would you have if this occurred in your facility?
  - How would you respond?
  - What are your initial questions?

# Containment Response Timeline (1/2)

## Facility notification – 8:30 am

- Facility IP responded promptly to MDH outreach to provide more information as requested. The facility has a policy on CPOs, and the IP will inform leadership of the MDH notification.

## Prompt communication – 2:30 meeting with MDH

- Facility leadership organized a multidisciplinary team that has a call with MDH at 2:30 in the afternoon to review next steps and actions to take. The Administrator, Director of Nursing (DON)/Chief Nursing Officer (CNO), IP, Environmental Services (EVS) Supervisor, and Nursing Unit Team Lead are all on the call to hear information and to ask questions. The Medical Director is unable to attend; a summary will be provided by the IP later.

## Colonization Screening - 5 days

- Colonization screening is conducted on the affected unit within 5 days of original notification. Prior to the colonization screening, the IP has a meeting to review MDH instructions and to plan for specimen collection. A few questions arose, and the IP clarified instructions with MDH. Education is provided to residents/patients the day prior. Three staff members are designated to assist with specimen collection, labeling, and shipping. The colonization screening goes well.

# Containment Response Timeline (2/2)

## ICAR onsite assessment – 10 days

- An onsite ICAR visit occurs 10 days from the original notification. The facility reviews the ICAR assessment prior to the onsite visit. A meeting room is reserved and the Administrator, DON/CNO, IP, Educator, EVS Supervisor, and Unit Team Lead all join the meeting for agenda items that apply to their area. The MDH staff provide an overview of the containment organism and conduct the ICAR assessment. Four days later the ICAR Nurse Specialist sends the ICAR Action Plan with recommendations and resources.

## Implement recommendations

- The IP coordinates an internal meeting to discuss the action plan recommendations. Various tasks are assigned to multiple staff. A list of follow-up questions were raised from staff (next slide) and will be sent to MDH for further collaboration.

# Staff Questions

**Here are some questions that staff asked:**

- Activity staff ask - Can she still go to bingo on Tuesdays?
  - Does she need to wear gloves when playing bingo?
- Therapy staff ask - Can she ambulate in the hallway?
  - Do staff need to wear PPE in the hall?
- The Unit Nurse asks - What if she tests positive for influenza?
  - Are there any additional precautions that needs to be done?



## Inter-facility communication

Mrs. Apple needs to be transferred for a decline in her medical condition.

Staff communicate information verbally and in writing to:

- ✓ Transport team/EMS
- ✓ The receiving facility
- ✓ Communication is documented
- ✓ While not required, the MDH HAI/AR Epidemiologist is notified of the transfer.

## Scenario #2 Summary

The facility in this scenario was well prepared and had a robust response:

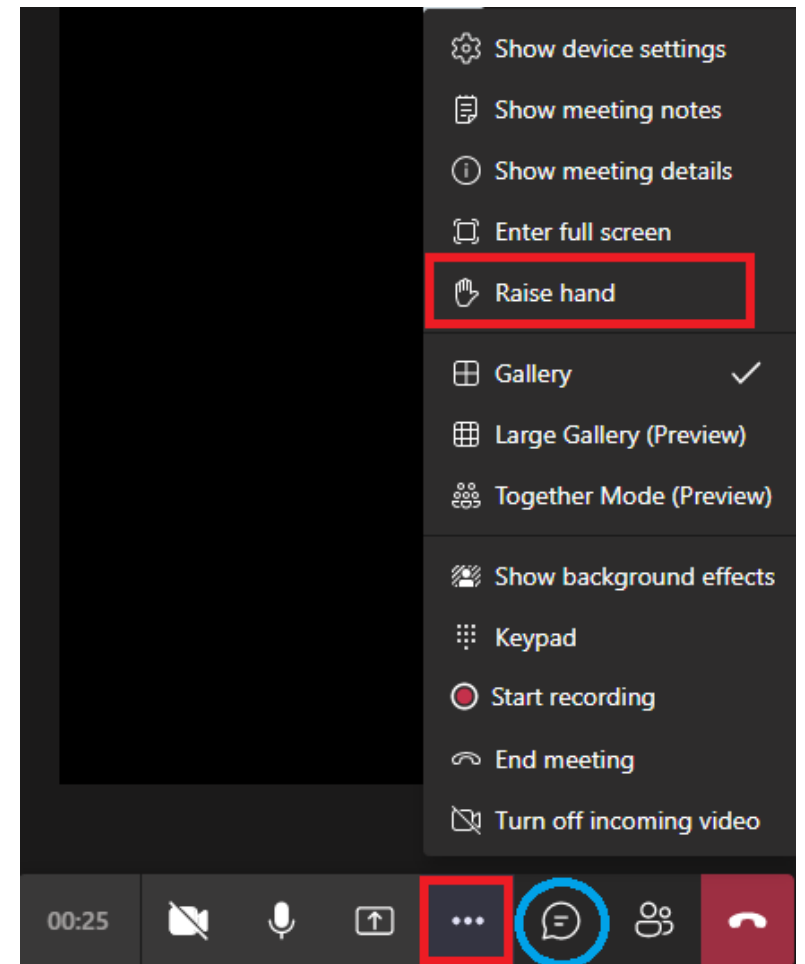
- Prompt communication and collaboration (understood the importance of preventing further spread).
- Demonstrated strong leadership support.
- Dedicated multidisciplinary team members.
- Prepared for colonization screening.
- Participated in an onsite ICAR assessment.
- Reviewed and implemented IPC recommendations.
- Clear communication with EMS and receiving facility when transfer was needed.

# In Summary

- Containment responses are a high priority at MDH - We are here to help!
- Three main elements factor into a successful response:
  - 1) Prompt communication
  - 2) Colonization screening/PPS
  - 3) ICAR Assessment
- Early identification is important to implement prompt interventions.
- Clear communications between health care facilities is vital.
- ALL FACILITIES: Need to prepare to care for colonized or infected patients/residents with CPO's and/or *C. auris* in our state.

# How to Ask a Question for Q & A

- **Participants are muted.** We will answer as many questions as we can at the end of the presentation.
- **Two ways to ask a question** or provide a comment:
  1. Raise your hand (**outlined in red**).
  2. Click the Chat bubble (**circled in blue**) to open the chat.
- For phone attendees, press **\*5** to raise your hand, and **\*6** to unmute/mute yourself.
- **We will select speakers** in order and add questions from the chat at the end of the presentation.



Questions?



# Thank You!!!

Contact Sarah Grebenc at [Sarah.Grebenc@state.mn.us](mailto:Sarah.Grebenc@state.mn.us) for questions related to nursing home or hospital survey process.

Contact Tammy Hale at [health.icar@state.mn.us](mailto:health.icar@state.mn.us) for questions related to infection prevention and control or the MDH containment response.