

COCA Call Information

- ❑ For the best quality audio, we encourage you to use your computer's audio.

- ❑ Webinar Link:
<https://zoom.us/j/535497188>

- ❑ If you cannot join through digital audio, you may join by phone in listen-only mode:
 - US: 1(646) 876-9923 or 1(669) 900-6833
 - Webinar ID: 535 497 188

- ❑ All questions must be submitted through the webinar system via the **Q&A button**. Please do not ask a question using the chat button.

Preventing the Spread of Novel or Targeted Multidrug-resistant Organisms (MDROs) in Nursing Homes through Enhanced Barrier Precautions

Clinician Outreach and Communication Activity (COCA) Webinar

emergency.cdc.gov/coca

October 24, 2019



Continuing Education for this COCA Call

All continuing education (CME, CNE, CEU, CECH, ACPE, CPH, and AAVSB/RACE) for COCA Calls are issued online through the [CDC Training & Continuing Education Online system](http://www.cdc.gov/TCEOnline/) (<http://www.cdc.gov/TCEOnline/>).

Those who participated in today's COCA Call and who wish to receive continuing education should complete the online evaluation by **November 25, 2019** with the course code **WC2922**.

Those who will participate in the on demand activity and wish to receive continuing education should complete the online evaluation between **November 25, 2019** and **November 26, 2021** and use course code **WD2922** .

Continuing education certificates can be printed immediately upon completion of your online evaluation. A cumulative transcript of all CDC/ATSDR CEs obtained through the CDC Training & Continuing Education Online System will be maintained for each user.

Continuing Education Disclaimer

- ❑ **In compliance with continuing education requirements, CDC, our planners, our presenters, and their spouses/partners wish to disclose they have no financial interests or other relationships with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters.**
- ❑ **Planners have reviewed content to ensure there is no bias. Content will not include any discussion of the unlabeled use of a product or a product under investigational use.**
- ❑ **CDC did not accept commercial support for this continuing education activity.**

To Ask a Question

- ❑ **Using the Webinar System**
 - Click on the **Q&A** button in the Zoom webinar system.
 - Type your question in the **Q&A** box.
 - Submit your question.
 - Please do not submit a question using the chat button.
- ❑ **For media questions, please contact CDC Media Relations at 404-639-3286 or send an email to media@cdc.gov.**
- ❑ **If you are a patient, please refer your questions to your healthcare provider.**

At the conclusion of the session, participants will be able to accomplish the following:

- 1. Describe the burden of multidrug-resistant organisms (MDROs).**
- 2. Describe challenges to preventing MDRO transmission in nursing homes.**
- 3. Define Standard Precautions, Enhanced Barrier Precautions, and Contact Precautions.**
- 4. Identify which residents and activities meet criteria for Enhanced Barrier Precautions.**
- 5. Discuss best practices for implementing Enhanced Barrier Precautions.**

Today's First Presenter



Nimalie Stone, MD, MS
Team Lead, Long-term Care Team
Prevention and Response Branch
Division of Healthcare Quality Promotion
Centers for Disease Control and Prevention

Today's Second Presenter



Kara Jacobs-Slifka, MD, MPH
LCDR United States Public Health Service
Long-term Care Team, Prevention and Response Branch
Division of Healthcare Quality Promotion
Centers for Disease Control and Prevention



Enhanced Barrier Precautions in Nursing Homes to Prevent the Spread of Novel or Targeted Multidrug-Resistant Organisms

Nimalie D. Stone, MD, MS

Kara Jacobs-Slifka, MD, MPH

Long-term Care Team, Prevention and Response Branch

Division of Healthcare Quality Promotion

CDC Clinician Outreach and Communication Activity (COCA)

October 24, 2019

Today's Outline

- Burden of multidrug-resistant organisms (MDRO)
- Challenges with preventing MDRO transmission
- Define Standard Precautions, Enhanced Barrier Precautions, and Contact Precautions
- Identify which residents and activities meet criteria for Enhanced Barrier Precautions
- Discuss best practices for implementing Enhanced Barrier Precautions

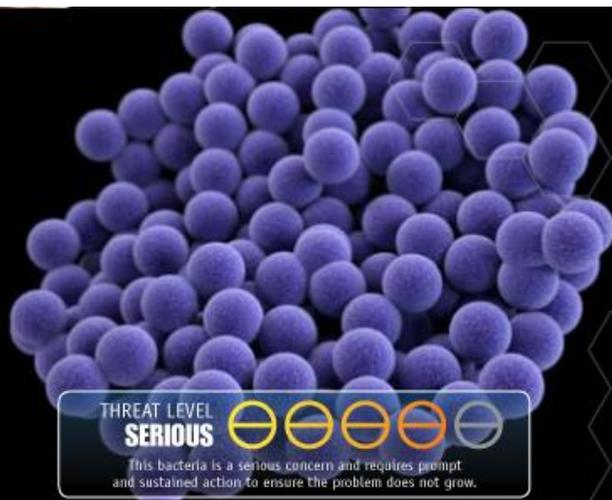
Threat of Antibiotic Resistance (AR)

- 2013 CDC Antibiotic Resistance Threats in the United States
 - Estimated more than 2 million antibiotic-resistant infections and at least 23,000 deaths in US hospitals each year
- Infections from antibiotic resistant organisms are more costly and difficult to treat
- Capacity to detect new antibiotic resistance is constantly expanding

[Antibiotic Resistance \(AR\) Biggest Threats and Data](https://www.cdc.gov/drugresistance/biggest-threats.html)

(<https://www.cdc.gov/drugresistance/biggest-threats.html>)





METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA)

THREAT LEVEL
SERIOUS ○○○○○○
This bacteria is a serious concern and requires prompt and sustained action to ensure the problem does not grow.

 **80,461** SEVERE MRSA INFECTIONS PER YEAR

 **11,285** DEATHS

 **STAPH BACTERIA ARE A LEADING CAUSE OF HEALTHCARE-ASSOCIATED INFECTIONS**



EXTENDED SPECTRUM β -LACTAMASE (ESBL) PRODUCING ENTEROBACTERIACEAE

THREAT LEVEL
SERIOUS ○○○○○○

 **26,000** DRUG-RESISTANT INFECTIONS

 **1,700** DEATHS

 **140,000** ENTEROBACTERIACEAE INFECTIONS PER YEAR

 **\$40,000** IN EXCESS MEDICAL COSTS PER YEAR FOR EACH INFECTION





CARBAPENEM-RESISTANT ENTEROBACTERIACEAE

THREAT LEVEL
URGENT ○○○○○○
This bacteria is an immediate public health threat that requires urgent and aggressive action.

 **9,000** DRUG-RESISTANT INFECTIONS PER YEAR

 **600** DEATHS

CARBAPENEM-RESISTANT KLEBSIELLA SPP. **7,900**  **1,400** **CARBAPENEM-RESISTANT E. COLI**

 **CRE HAVE BECOME RESISTANT TO ALL OR NEARLY ALL AVAILABLE ANTIBIOTICS** 

Carbapenemase-Producing Organisms (CPOs): Emerging Resistance Threat

- Produce enzymes that breakdown carbapenems
- Carry resistance genes on mobile genetic elements, called plasmids, that can be easily spread
- Cause invasive infections associated with high mortality rates due to challenges finding effective antibiotic treatment
- Emerging throughout the United States and around the globe



PROBLEM:

**Antibiotic-resistant germs can
spread like wildfire.**

Carbapenemases found in CPOs



- Multiple different mechanisms can cause high level resistance
 - Examples of Carbapenemase-producing genes found in CRE (CP-CRE)
 - **KPC** - *Klebsiella pneumoniae* carbapenemase (most common in U.S.)
 - **NDM** – New Delhi Metallo- β -lactamase
 - **VIM** – Verona Integron-encoded Metallo- β -lactamase
 - **OXA** – Oxacillinase-48-type carbapenemases
 - **IMP** – Imipenemase Metallo- β –lactamase
- These genes have been reported in Enterobacteriaceae, *Pseudomonas aeruginosa* and *Acinetobacter baumannii*
- Public health laboratories offer carbapenemase testing

Candida auris

- Emerging fungal pathogen
- Tends to be drug-resistant
- Colonized individuals have risk of invasive infection
 - 5-10% develop *C. auris* bloodstream infection within a year
- Yeast that spreads easily in healthcare settings, similar to resistant bacteria



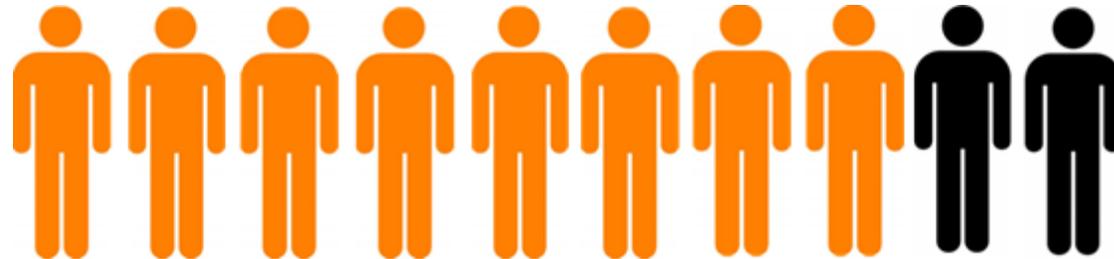
Snapshot of Multidrug-Resistant Organism (MDRO) Carriage in Nursing Homes

Facilities with skilled units (n=14)



Median: 58% MDRO carriage

Facilities with ventilator units (n=4)



Median: 76% MDRO carriage

McKinnell JA et al. Clin Infect Dis. 2019. 69(9):1566-1573

Risks for MDRO Colonization and Acquisition in Nursing Homes

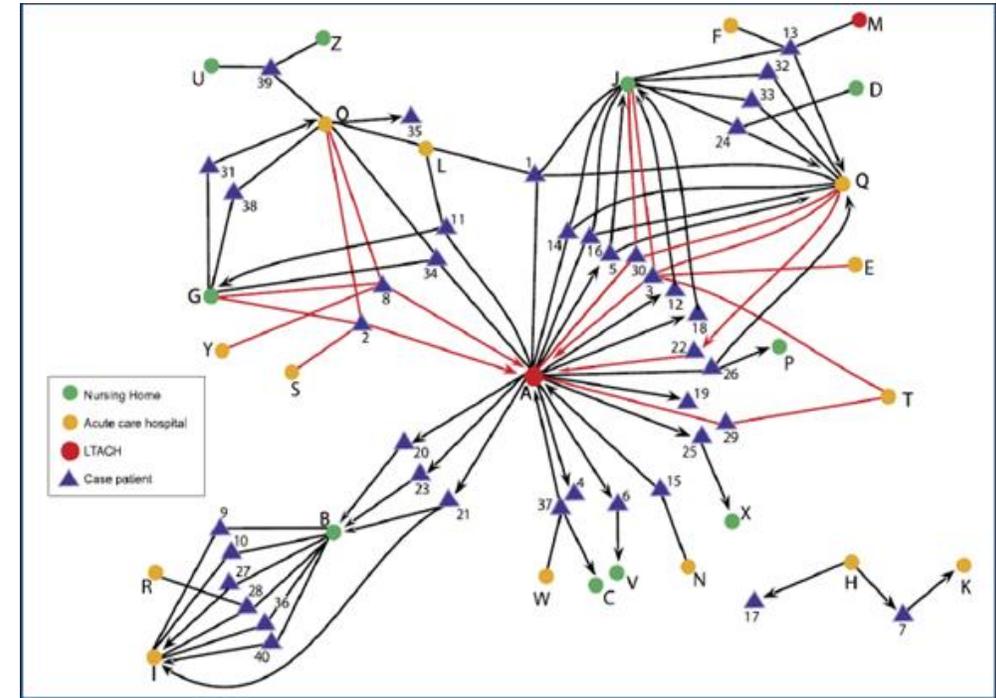
- Indwelling medical devices (e.g., urinary catheter, PEG tube, tracheostomy/vents, central line)
- Presence of wounds or decubitus ulcers
- Antibiotic use in prior 3 months, particularly fluoroquinolones
- Recent hospitalization
- Comorbid medical conditions
- Increased functional dependence



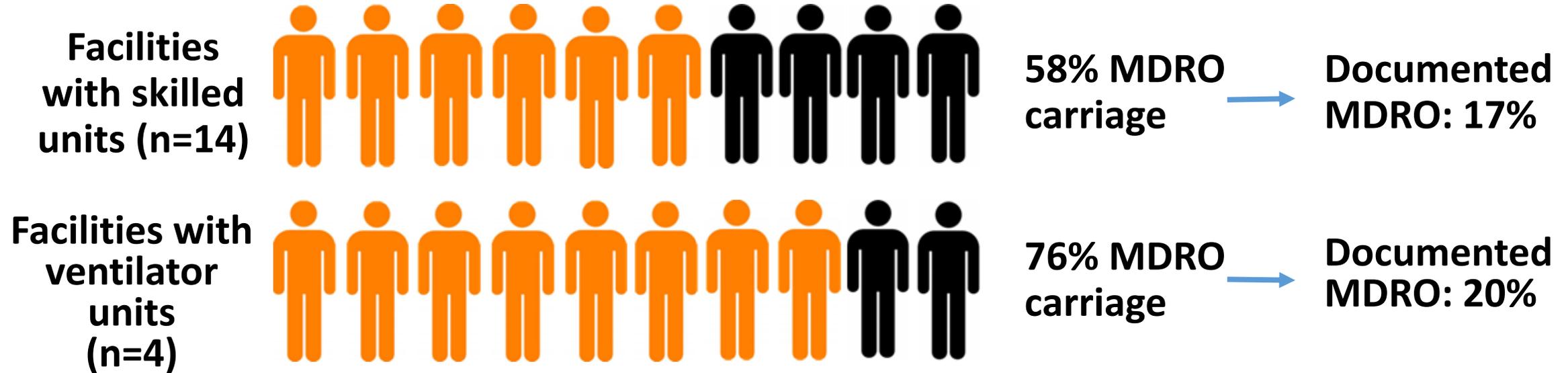
Prolonged length of stay also increases opportunities for spread

Healthcare Networks Drive MDRO Spread

- Patient movements amplify the regional burden of MDROs, especially in centers with:
 - Longer length of stay
 - Increasing acuity of care
 - Decreased staff: patient ratios
 - Gaps in infection prevention practices



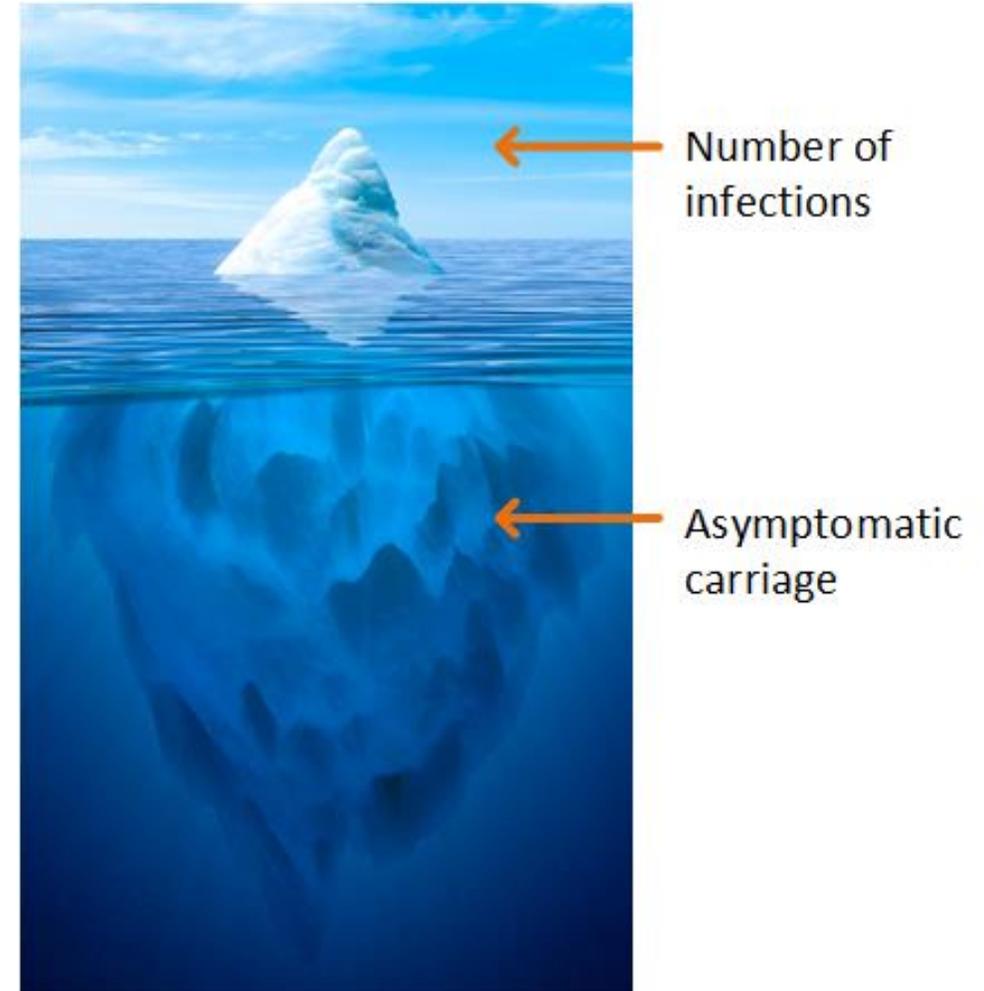
Unrecognized MDRO Carriage in Nursing Homes



McKinnell JA et al.
Clin Infect Dis. 2019.
69(9):1566-1573

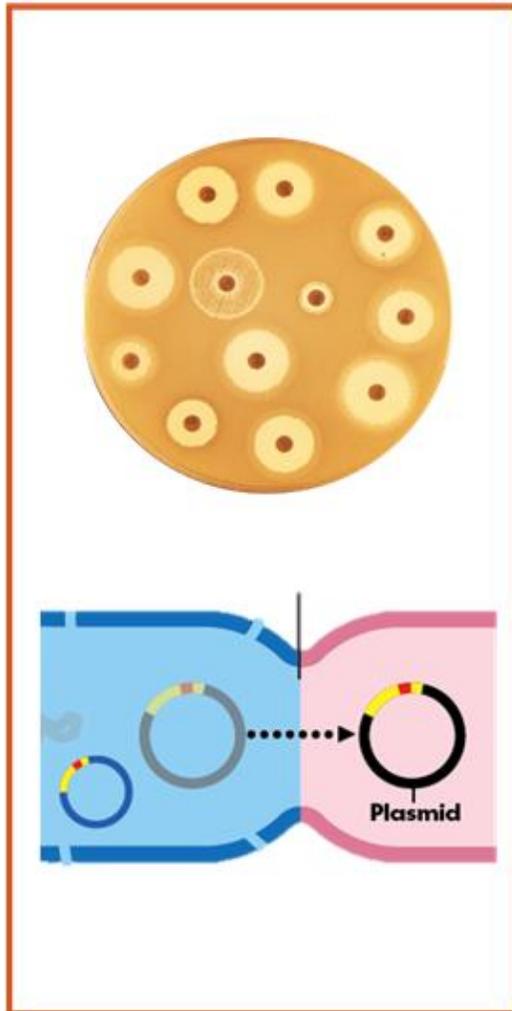
Challenges with Detection of MDROs

- Clinical cultures underestimate true prevalence of MDROs
- Most centers are not performing active surveillance to identify asymptomatic, colonized residents
 - ***Contribute to the reservoir for transmission***
- Inadequate communication about individual MDRO history or risk factors between healthcare facilities during care transitions

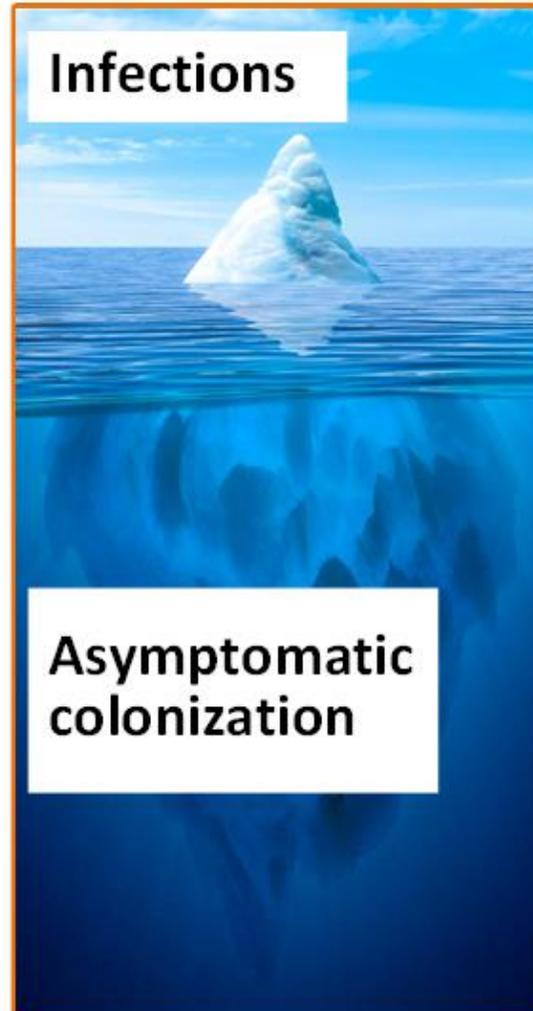


Characteristics of Novel/Targeted MDROs in Healthcare

Resistance



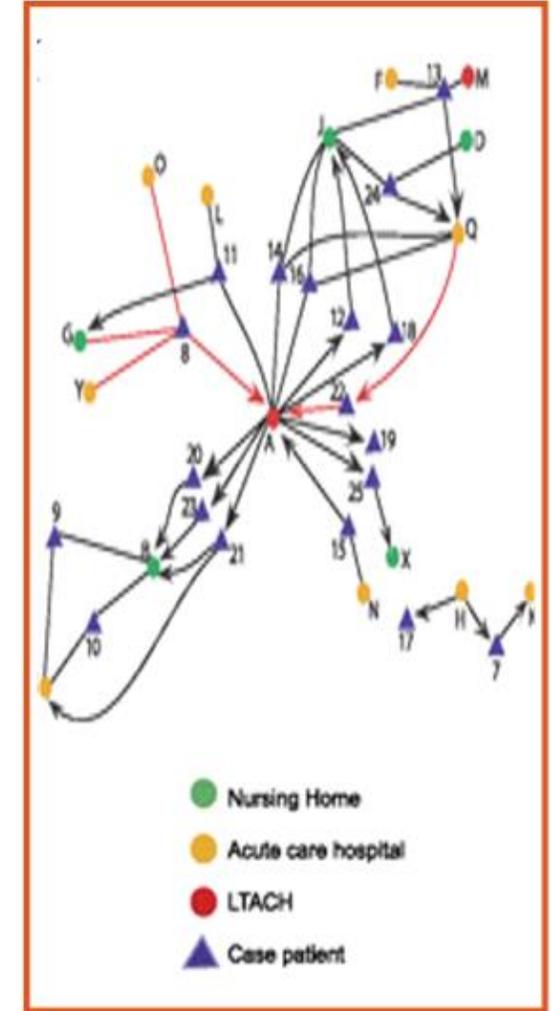
Detection



Transmission



Spread



Containment Strategy

Systematic public health response to slow the spread of emerging AR



Detection

Often responding to a single case



Infection Control

Onsite assessment using standardized tools



Contact Screening

Available through ARLN



Regular infection control assessments and screening (point prevalence surveys) until transmission stops.

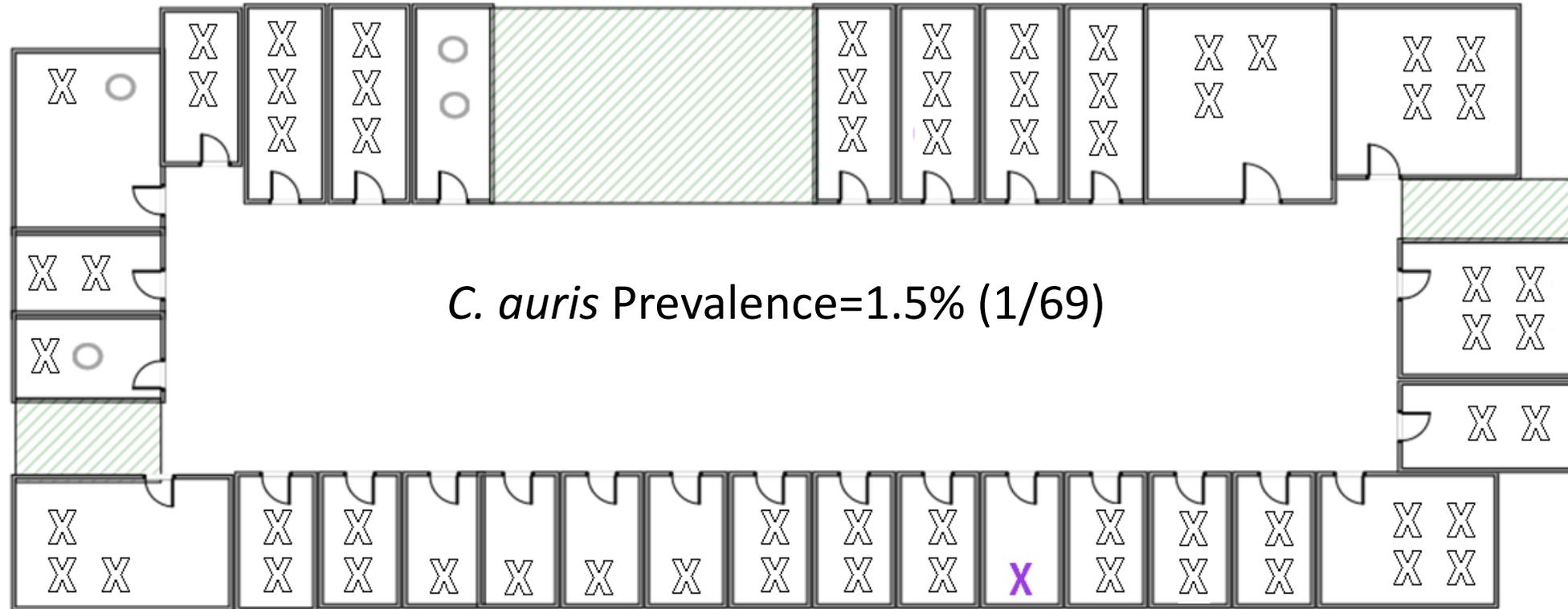


AR Containment Response Experience in Post-acute Care

Review of ~113 CDC supported responses to emerging AR pathogens from Jan 2017-Dec 2018

- Over 60% (72) involved post-acute care facilities (i.e., long-term acute care hospitals, nursing homes, inpatient rehabilitation facilities)
 - 70% of these post-acute care responses occurred in high-acuity facilities, LTACHs or nursing homes with ventilator units
- Although ventilator services in nursing homes remain relatively rare, (<5%), 25% of AR containment responses involved nursing homes with this capability

Ventilator Floor March 2017 *C. auris* Prevalence



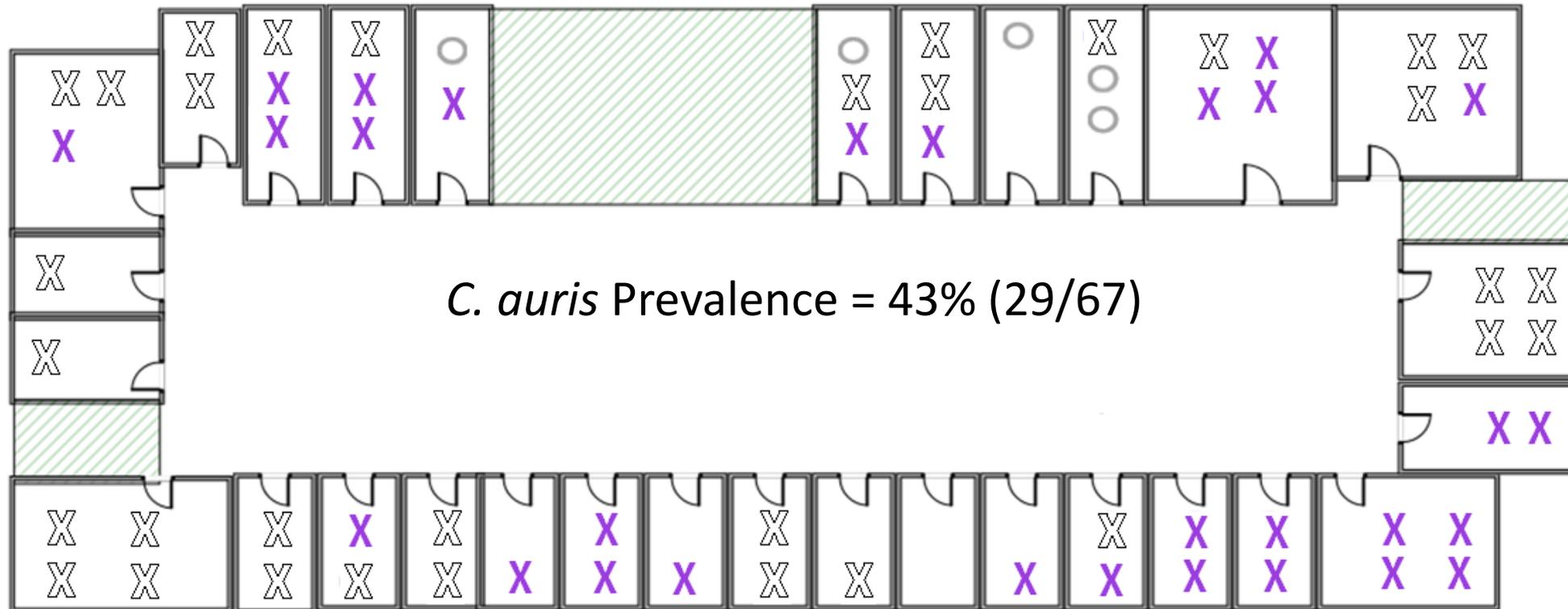
X *C. auris* positive (1)

X Screened negative for *C. auris* (64)

O Not tested for *C. auris* (refused or not in room) (4)

Slide courtesy of Chicago Department of Public Health.

Ventilator Floor January 2018 *C. auris* Prevalence



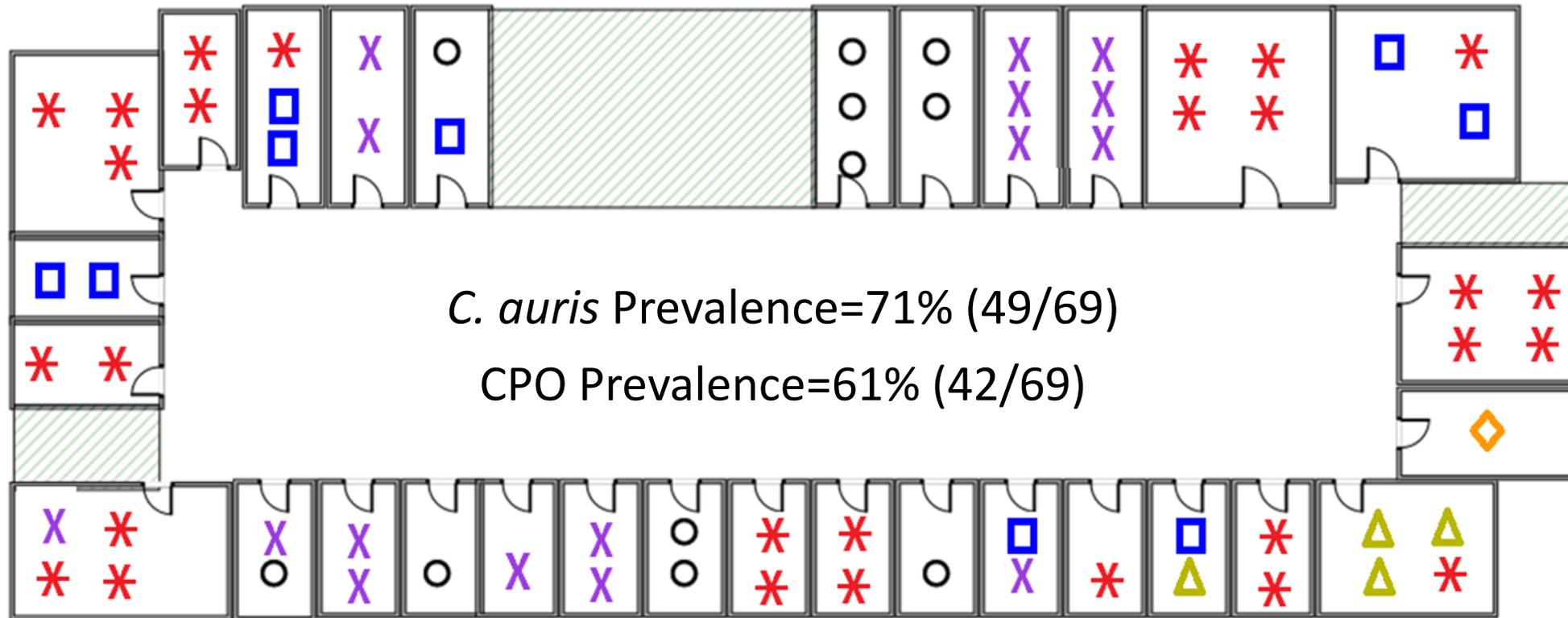
X *C. auris* positive (29)

X Screened negative for *C. auris* (33)

O Not tested for *C. auris* (refused or not in room) (5)

Slide courtesy of Chicago Department of Public Health.

Ventilator Floor October 2018 *C. auris* and CPO Prevalence



X *C. auris* positive (16)

* *C. auris*, and KPC-CPO (28)

□ KPC-CPO (9)

◇ *C. auris*, KPC-CPO, NDM-CPO (1)

△ *C. auris*, KPC-CPO, VIM-CPO (4)

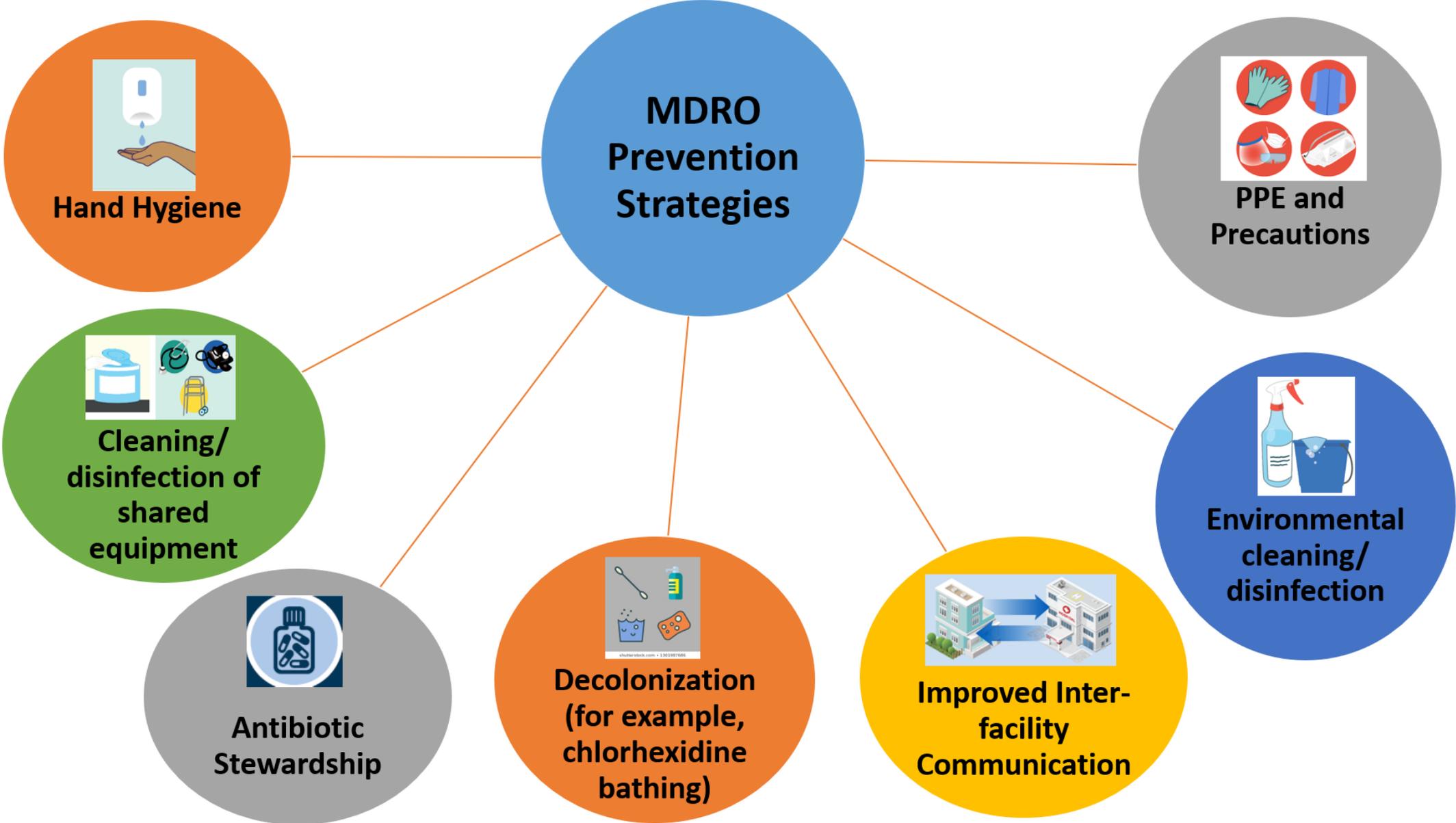
○ No known CPO or *C. auris* (11)

Slide courtesy of Chicago Department of Public Health.

Common Infection Control Challenges Identified during AR Containment Responses

- Gaps in adherence to hand hygiene, limited access to alcohol-based hand rubs inside and outside of resident rooms
- Limited access to personal protective equipment (PPE) and minimal use of Contact Precautions
- Improper product selection, use and frequency to reduce environmental surface contamination within shared rooms
- Inadequate cleaning/disinfection of equipment shared between residents
- Incomplete communication of MDRO history or risk factors during facility transfers

MDRO Prevention: Novel and Core Strategies

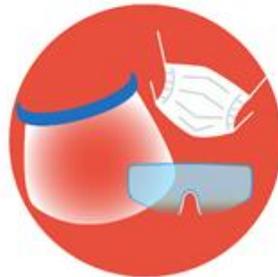
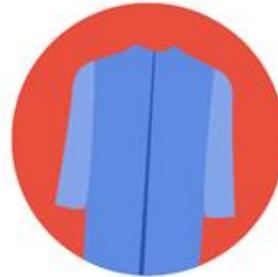


Implementing PPE and Precautions in Nursing Homes

Personal Protective Equipment (PPE) & Precautions



**Standard
Precautions**



**Transmission-
Based
Precautions**

Standard Precautions



PPE



Respiratory Hygiene & Cough Etiquette



Hand Hygiene



Environmental Cleaning & Disinfection



Injection & Medication Safety



Reprocessing of Reusable Medical Equipment

Transmission-Based Precautions

STOP CONTACT PRECAUTIONS STOP
EVERYONE MUST:



Clean their hands, including before entering and when leaving the room.

PROVIDERS AND STAFF MUST ALSO:



Put on gloves before room entry.
Discard gloves before room exit.



Put on gown before room entry.
Discard gown before room exit.

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



Use dedicated or disposable equipment.
Clean and disinfect reusable equipment before use on another person.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

STOP DROPLET PRECAUTIONS STOP
EVERYONE MUST:



Clean their hands, including before entering and when leaving the room.



Make sure their eyes, nose and mouth are fully covered before room entry.

or



Remove face protection before room exit.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

STOP AIRBORNE PRECAUTIONS STOP
EVERYONE MUST:



Clean their hands, including before entering and when leaving the room.



Put on a fit-tested N-95 or higher level respirator before room entry.

Remove respirator after exiting the room and closing the door.



Door to room must remain closed.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

[Transmission-Based Precautions](https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html)

(<https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>)

Contact Precautions for MDROs

- Perform hand hygiene
- Gown and gloves upon room entry
- Dedicated equipment
- Private room
- Room restriction

STOP **CONTACT PRECAUTIONS** **STOP**
EVERYONE MUST:

 Clean their hands, including before entering and when leaving the room.

PROVIDERS AND STAFF MUST ALSO:

 Put on gloves before room entry. Discard gloves before room exit.

 Put on gown before room entry. Discard gown before room exit.
Do not wear the same gown and gloves for the care of more than one person.

 Use dedicated or disposable equipment. Clean and disinfect reusable equipment before use on another person.

© 2010 CDC

 U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Difficulty in Applying Transmission-Based Precautions for MDROs in Nursing Homes

- “Transmission-Based Precautions must be used when a resident develops **signs and symptoms** of a transmissible infection”
- “Facility policies must identify type and **duration** of Transmission-Based Precautions”
- “Transmission-Based Precautions should be the **least restrictive possible** for the resident based on his/her clinical situation and used for the **least amount of time**”
- “Once the resident is **no longer a risk for transmitting the infection... removing Transmission-Based Precautions is required**”

Department of Health and Human Services. Centers for Medicare and Medicaid Services. Rev. 173, 11-22-17.
[State Operations Manual Appendix PP: Guidance to Surveyors for Long Term Care Facilities \[PDF – 749 pages\]](https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltc.pdf)

https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltc.pdf

Difficulty in Applying Transmission-Based Precautions for MDROs in Nursing Homes

- “Transmission-Based Precautions are required for a resident who develops signs and symptoms of a MDRO”
- **Colonization ≠ Infection**
- “Facility policies must identify type and **duration** of Transmission-Based Precautions”
- “Transmission-Based Precautions should be the **least restrictive possible** for the resident based on his/her clinical situation and used for the **least amount of time**”
- “Once the resident is **no longer a risk for transmitting the infection... removing Transmission-Based Precautions is required**”

Department of Health and Human Services. Centers for Medicare and Medicaid Services. Rev. 173, 11-22-17.
[State Operations Manual Appendix PP: Guidance to Surveyors for Long Term Care Facilities \[PDF – 749 pages\]](https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltc.pdf)

https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltc.pdf

Difficulty in Applying Transmission-Based Precautions for MDROs in Nursing Homes

- “Transmission-Based Precautions (TBP) are required for residents who have a MDRO **Colonization ≠ Infection** resident colonization”
- “Facility policies must identify type and **duration** of Transmission-Based Precautions”
- “Transmission-Based Precautions should be used for residents who have a MDRO **Duration of MDRO colonization can be prolonged (>6 months)** and used for the least amount of time possible”
- “Once the resident is **no longer a risk for transmitting the infection... removing Transmission-Based Precautions is required**”

Department of Health and Human Services. Centers for Medicare and Medicaid Services. Rev. 173, 11-22-17.
[State Operations Manual Appendix PP: Guidance to Surveyors for Long Term Care Facilities \[PDF – 749 pages\]](https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf)

https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf

Difficulty in Applying Transmission-Based Precautions for MDROs in Nursing Homes

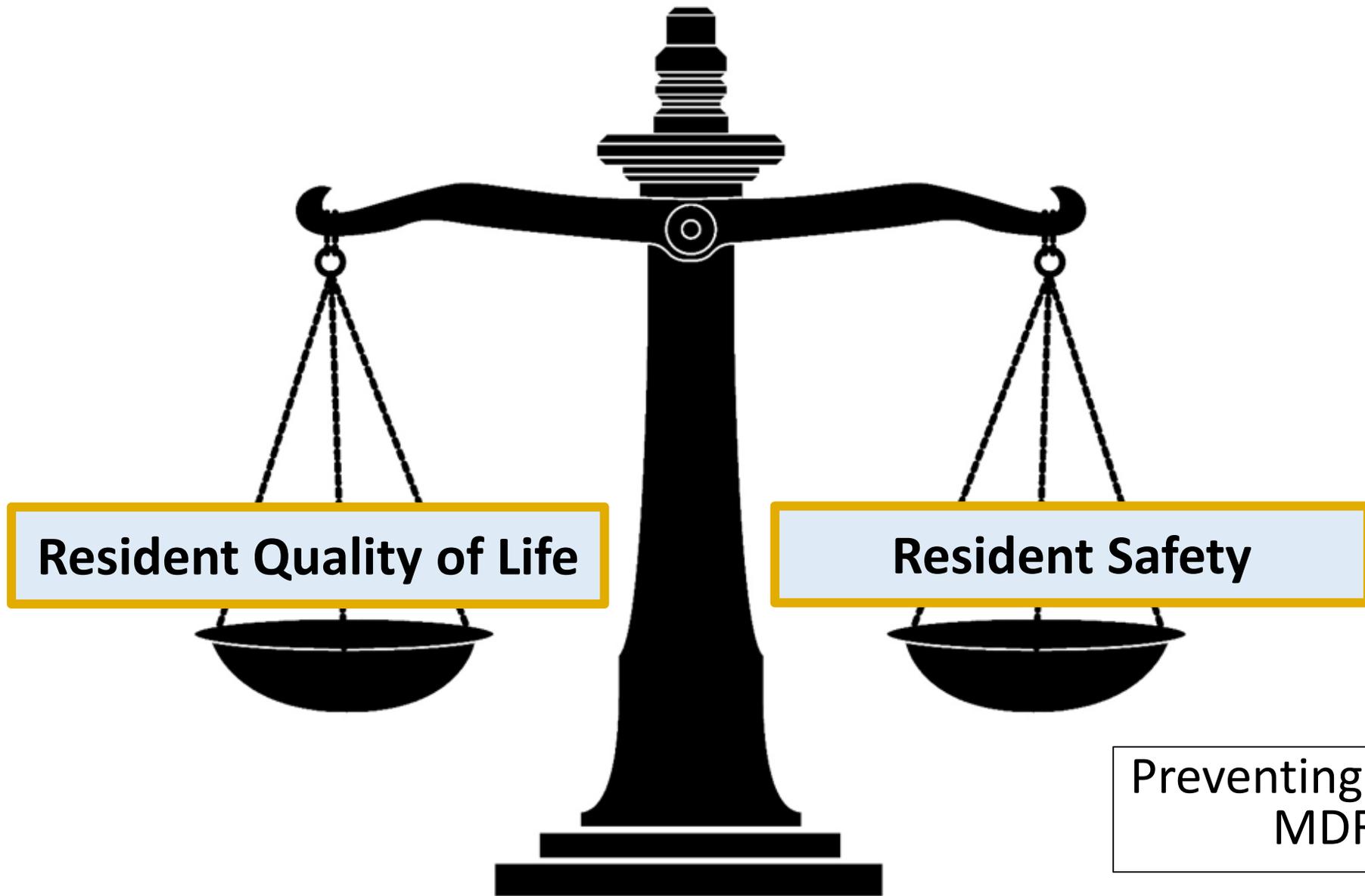
- “Transmission-based precautions are required for a resident who develops signs and symptoms of a MDRO”
Colonization ≠ Infection
- “Facility policies must identify type and **duration** of Transmission-Based Precautions”
- “Transmission-based precautions should be used for a resident who has a MDRO for a **possible** duration of the least **duration of MDRO colonization can be prolonged (>6 months)**”
- “Once the resident is no longer colonized, the resident is no longer at risk for transmitting the MDRO...
Resident remains at risk for transmitting the MDRO even when not actively infected

Department of Health and Human Services. Centers for Medicare and Medicaid Services. Rev. 173, 11-22-17.
[State Operations Manual Appendix PP: Guidance to Surveyors for Long Term Care Facilities \[PDF – 749 pages\]](#)

https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf

Focusing only on residents with active infection fails to address the **continued risk of transmission from residents with MDRO colonization,**

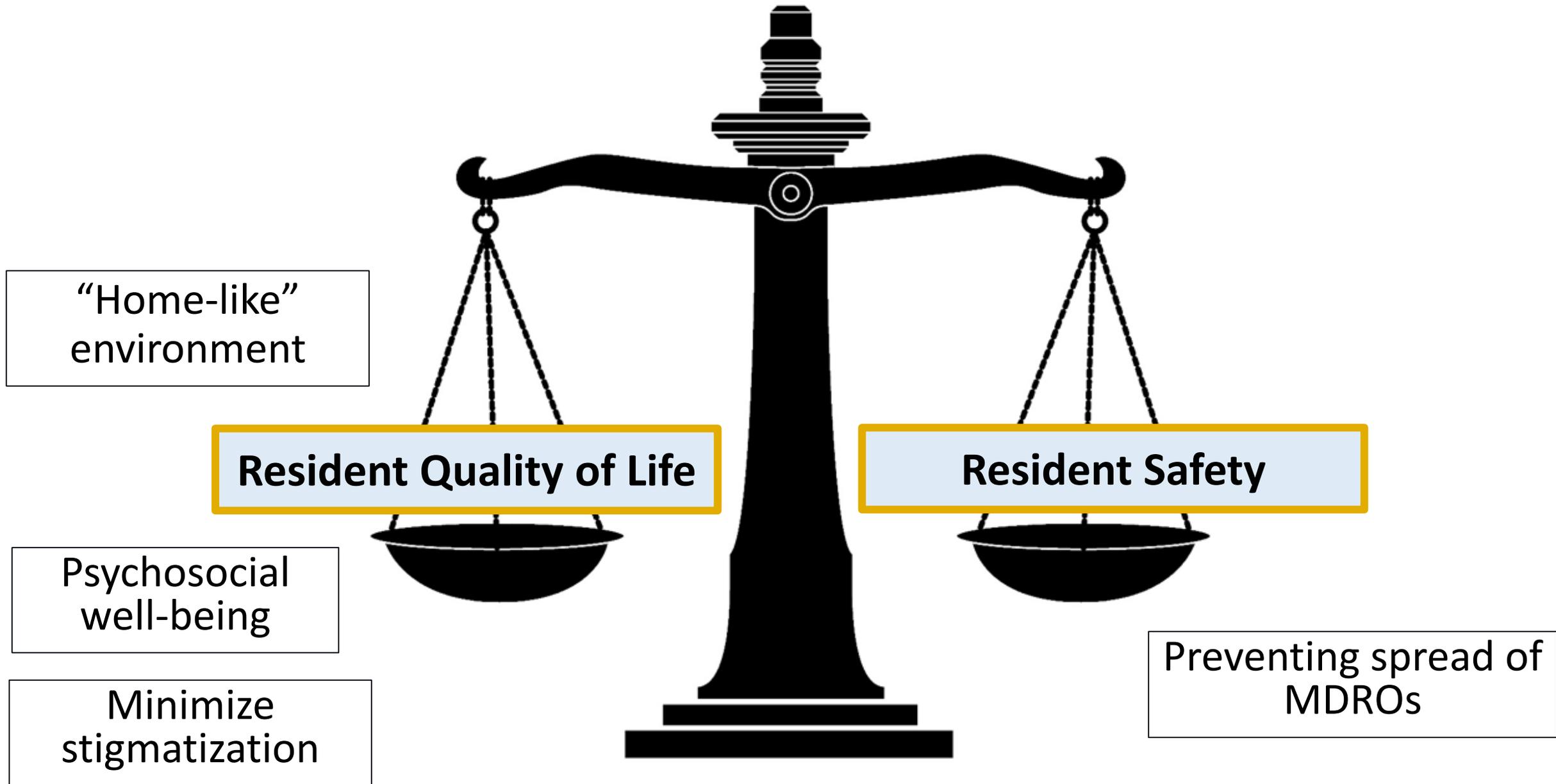
which can persist for long periods of time (e.g., months), and result in the silent spread of MDROs.



Resident Quality of Life

Resident Safety

Preventing spread of
MDROs



"Home-like" environment

Resident Quality of Life

Psychosocial well-being

Minimize stigmatization

Resident Safety

Preventing spread of MDROs

Lack of Private rooms

Difficulty in restricting movement/moving residents

“Home-like” environment

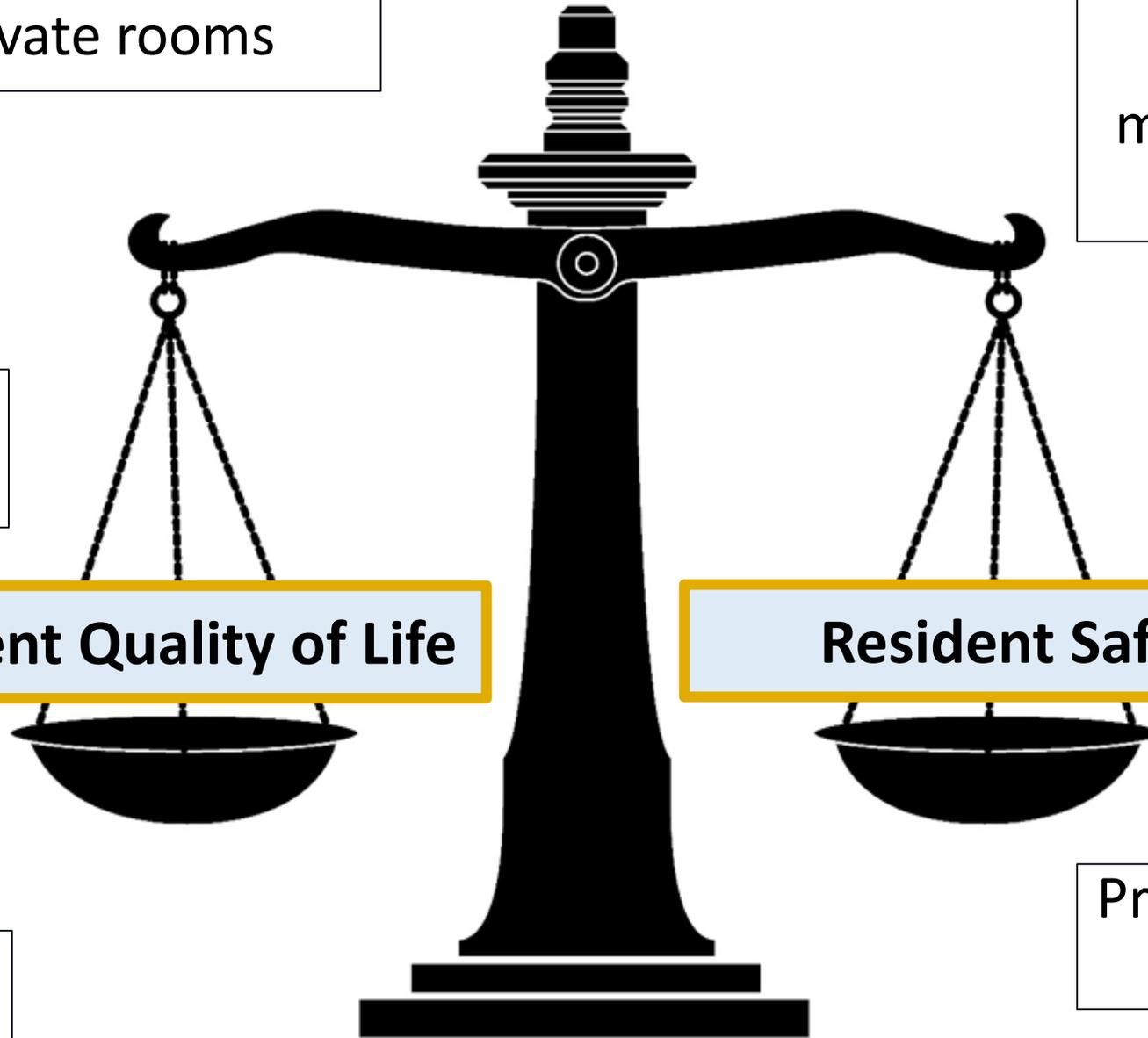
Resident Quality of Life

Resident Safety

Psychosocial well-being

Minimize stigmatization

Preventing spread of MDROs



The Need for a New Approach

- Clarification of how and when to use PPE and room restriction to prevent the spread of MDROs
- Balanced approach to managing the prolonged colonization and preventing the silent spread of MDROs
- Consider at-risk nursing home residents

Enhanced Barrier Precautions (EBP): Guidance for Nursing Homes to Prevent MDRO Spread

The screenshot shows the CDC website page for 'Implementation of Personal Protective Equipment (PPE) in Nursing Homes to Prevent Spread of Novel or Targeted Multidrug-resistant Organisms (MDROs)'. The page is part of the 'Healthcare-associated Infections (HAI) > Containment Strategy' section. The main content area features the title and a note: 'Note: This Interim Guidance was updated on 07/26/2019 to clarify its current intended use as part of a Containment Response'. A print version link is provided: 'Print version: [Implementation of PPE in Nursing Homes to Prevent Spread of MDROs](#) [PDF - 6 pages]'. The right sidebar contains a table of contents with links to 'Description of Existing Precautions', 'Description of New Precautions', 'Summary of PPE Use and Room Restriction', 'Implementation', and 'References'. The left sidebar shows a navigation menu with 'PPE in Nursing Homes' highlighted.

[Implementation of PPE in Nursing Homes to Prevent Spread of Novel or Targeted MDROs](https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html)

<https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html>

“Enhanced Barrier Precautions expand the use of PPE beyond situations in which exposure to blood and body fluids is anticipated

and refer to the **use of gown and gloves during high-contact resident care activities** that provide opportunities for transfer of MDROs to staff hands and clothing.”

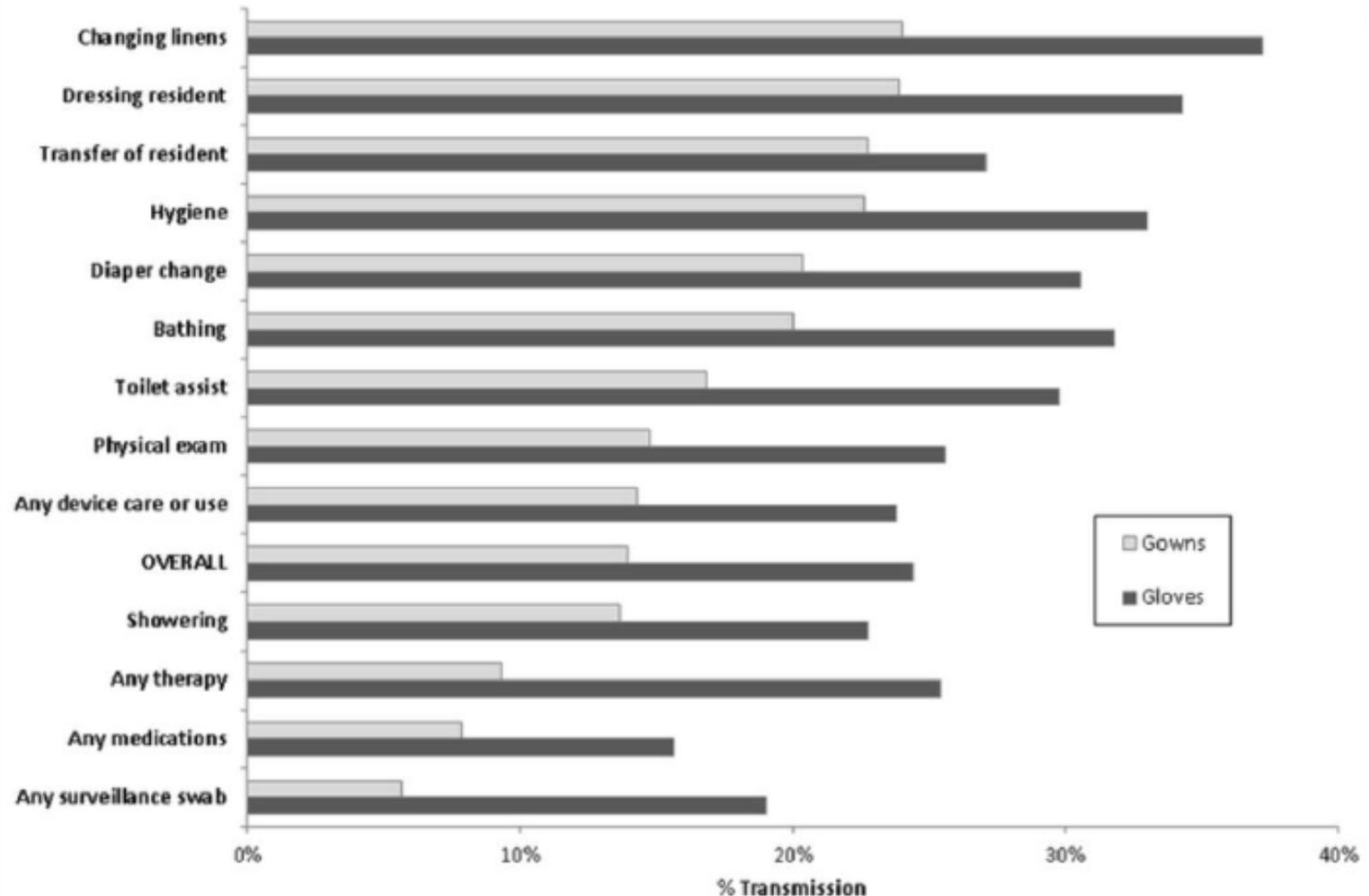
High-contact Resident Care Activities

- Dressing
- Bathing/showering
- Transferring
- Providing hygiene
- Changing linens
- Changing briefs or assisting with toileting
- Device care or use of a device: central line, urinary catheter, feeding tube, tracheostomy/ventilator
- Wound care: any skin opening requiring a dressing



MRSA Transmission to Gowns and Gloves of HCW during Care of Colonized Residents

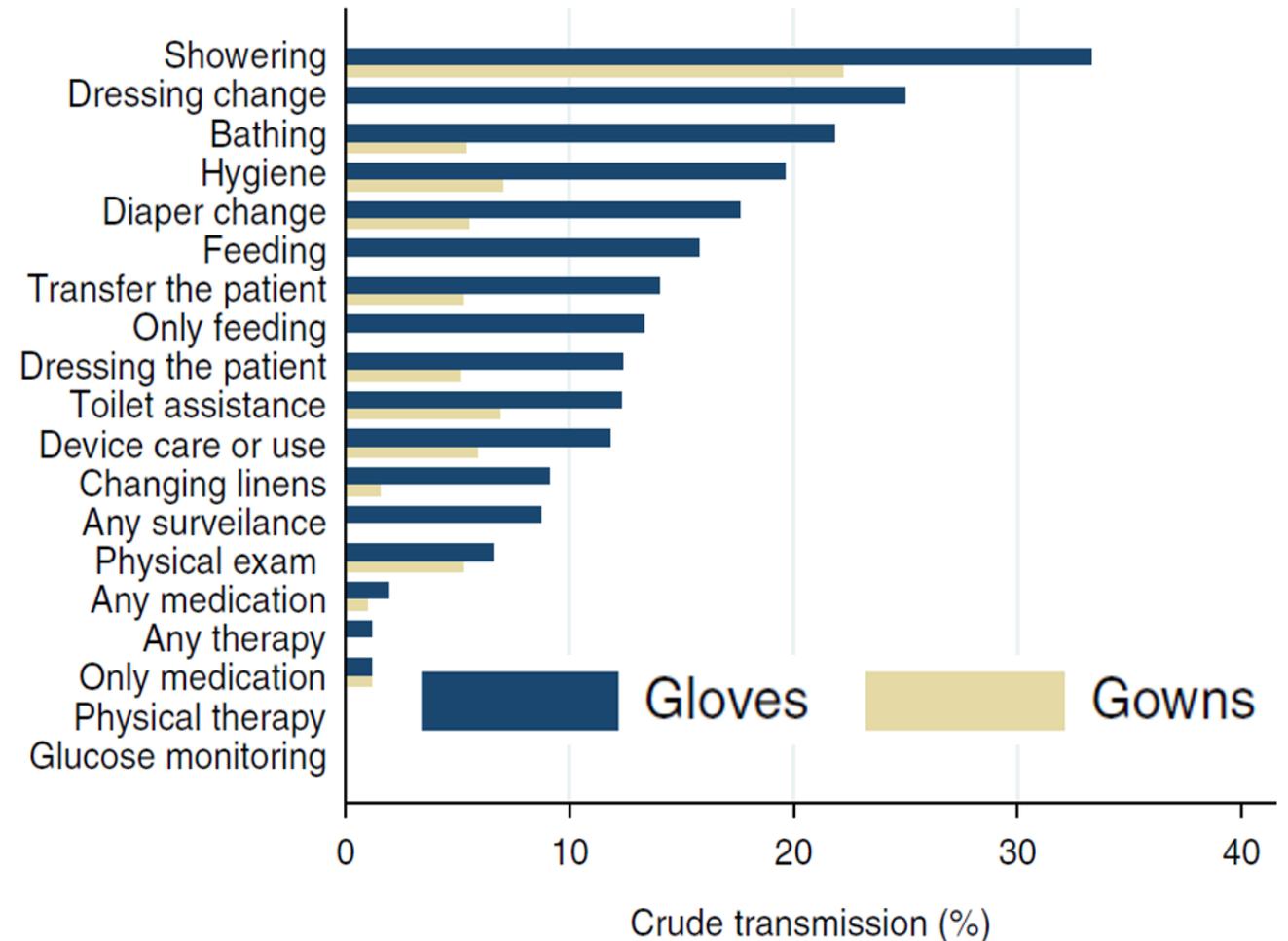
- **Highest Risk:**
 - Dressing
 - Transferring
 - Providing hygiene
 - Changing linens
 - Toileting
- **Lowest Risk:**
 - Giving Meds
 - Glucose monitoring



Roghmann et al. Infect Control Hosp Epidemiol.
2015 September; 36(9): 1050-1057

Resistant Gram-negative Bacteria (RGNB) Transmission to Gowns and Gloves of HCW during Care of Colonized Residents

- **Highest Risk:**
 - Showering
 - Hygiene
 - Toileting
 - Wound dressing changes
- **Lowest Risk:**
 - Assist feeding
 - Giving meds
 - Glucose monitoring



Enhanced Barrier Precautions should be used for all residents with any of the following:

- **Infection or colonization with a novel or targeted MDRO** (as of July 2019) defined as:
 - Pan-resistant organisms,
 - Carbapenemase-producing Enterobacteriaceae,
 - Carbapenemase-producing *Pseudomonas* spp.,
 - Carbapenemase-producing *Acinetobacter baumannii*,
 - *Candida auris*
- **Wounds and/or indwelling medical devices (e.g. central line, urinary catheter, feeding tube, tracheostomy/ventilator) regardless of MDRO colonization status** residing in an at-risk area
- When Contact Precautions do not apply

Contact Precautions should be used:

- **All residents infected or colonized with a novel or targeted multidrug-resistant organism in specific situations:**
 - Presence of acute diarrhea, draining wounds or other sites of secretions or excretions that are unable to be kept covered or contained
 - On units or in facilities where ongoing transmission is documented or suspected
- **For infections (e.g., *C. difficile*, norovirus, scabies) and other conditions where Contact Precautions is recommended**
 - See Appendix A – Type and duration of Precautions Recommended for Selected Infections and Conditions of the CDC Guideline for Isolation Precautions

Why was the EBP Guidance Needed for Containment?

Focusing only on residents with active infection fails to address the continued risk of transmission from residents with MDRO colonization, which can persist for long periods of time (e.g., months) and result in the silent spread of MDROS.

- Contact screening detects additional colonized residents not previously recognized
- Facilities needed an approach to gown/glove use that was less restrictive than Contact Precautions and could be sustained for prolonged period of time
- EBP also addresses care of residents at risk for acquiring colonization

As of July 2019, Novel or Targeted MDROs are defined as:

- Pan-resistant organisms,
- Carbapenemase-producing Enterobacteriaceae,
- Carbapenemase-producing *Pseudomonas* spp.,
- Carbapenemase-producing *Acinetobacter baumannii*, and
- *Candida auris*

Personal Protective Equipment (PPE) & Precautions



**Standard
Precautions**

**Enhanced
Barrier
Precautions**

**Contact
Precautions**



Standard Precautions

Precautions	Applies to:	PPE used for these situations:	Required PPE
<i>Standard Precautions</i>	<i>All residents</i>	<i>Any potential exposure to:</i> <ul style="list-style-type: none">■ Blood■ Body fluids■ Mucous membranes■ Non-intact skin■ Potentially contaminated environmental surfaces or equipment	Depending on anticipated exposure: gloves, gown, or face protection (PPE always changed and hand hygiene performed before care of another resident)

Application of Enhanced Barrier Precautions vs. Contact Precautions

Enhanced Barrier Precautions

Applies to:

All residents with any of the following:

- Infection or colonization with a novel or targeted MDRO **when Contact Precautions do not apply.**
- Wounds and/or indwelling medical devices (e.g., central line, urinary catheter, feeding tube, tracheostomy/ventilator) regardless of MDRO colonization status

Facilities may consider applying Enhanced Barrier Precautions to residents infected or colonized with other epidemiologically-important MDROs based on facility policy.

Contact Precautions

Applies to:

All residents infected or colonized with a novel or targeted multidrug-resistant in specific situations:

- Presence of acute diarrhea, draining wounds or other sites of secretions or excretions that are unable to be covered or contained
- On units or in facilities where ongoing transmission is documented or suspected

For infections (e.g., C. difficile, norovirus, scabies) and other conditions where Contact Precautions is recommended

See Appendix A – Type and Duration of Precautions Recommended for Selected Infections and Conditions of the CDC Guideline for Isolation Precautions

PPE Use in Enhanced Barrier Precautions vs. Contact Precautions

Enhanced Barrier Precautions

PPE used for these situations:

During high-contact resident care activities:

- Dressing
- Bathing/showering
- Transferring
- Providing hygiene
- Changing linens
- Changing briefs or assisting with toileting
- Device care or use: central line, urinary catheter, feeding tube, tracheostomy/ventilator
- Wound care: any skin opening requiring a dressing

Contact Precautions

PPE used for these situations:

Any room entry

Required PPE for Enhanced Barrier Precautions vs. Contact Precautions

Enhanced Barrier Precautions

Applies to:

Gloves and gown prior to the high-contact care activity

Note:

- *Does not require single-room*
- *Does not require restrictions of movement/participation within facility policy.*

Contact Precautions

Applies to:

Gloves and gown

Note:

- *Includes consideration for single room or cohorting*
- *Includes restriction of movement and participation in group activities within the facility*

Implementing Enhanced Barrier Precautions or Contact Precautions

Post Clear Signage outside of the Resident Room

- Indicate type of Precautions **and** required PPE
- For EBP, indicate high-contact resident care activities

STOP **ENHANCED BARRIER PRECAUTIONS** **STOP**

EVERYONE MUST:

 Clean their hands, including before entering and when leaving the room.

PROVIDERS AND STAFF MUST ALSO:

  Wear gloves and a gown for the following High-Contact Resident Care Activities.

Dressing
Bathing/Showering
Transferring
Changing Linens
Providing Hygiene
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

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

 U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

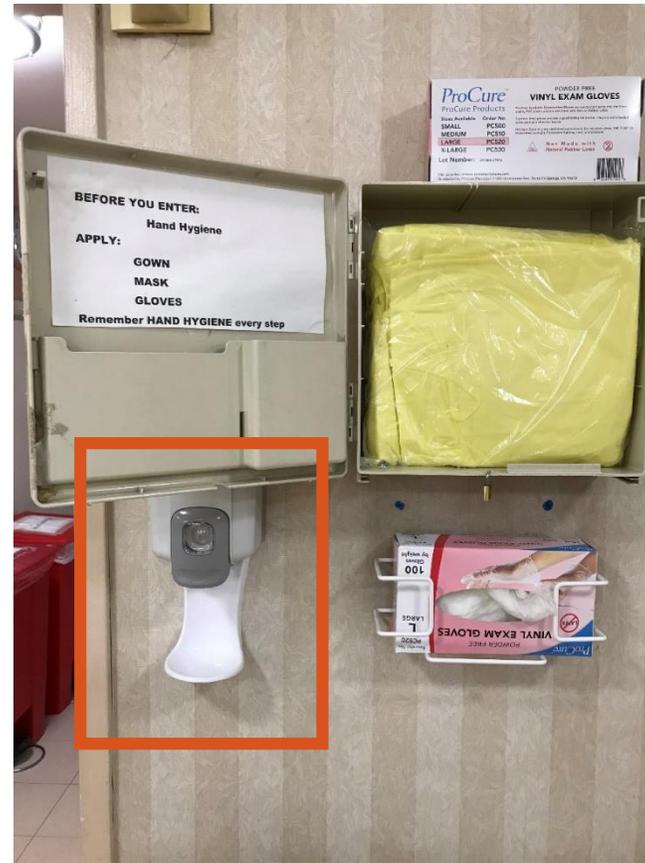
The Set-Up: Personal Protective Equipment

- PPE, including gowns and gloves, should be available **immediately outside** of resident room
- Plan for restocking
- Position a trash can inside resident room and near exit for discarding PPE

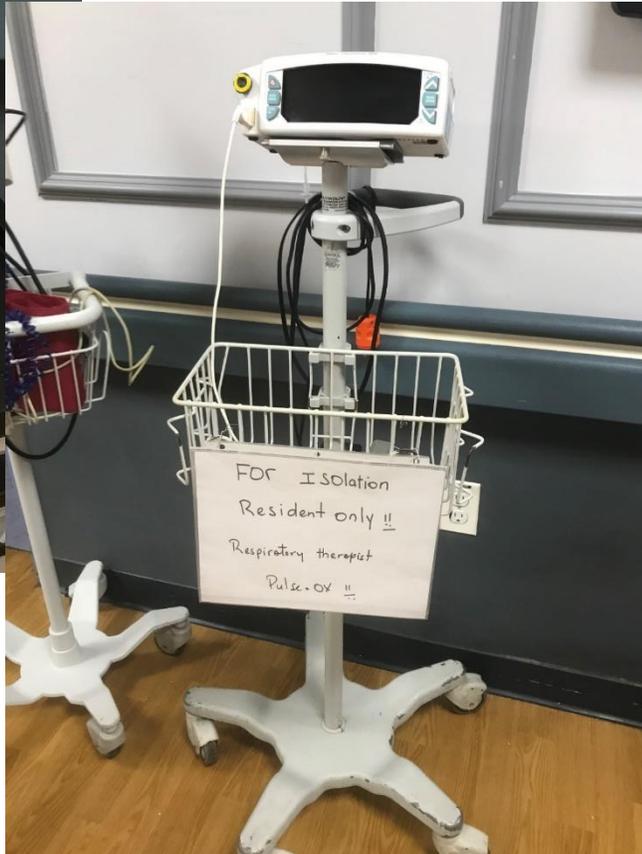
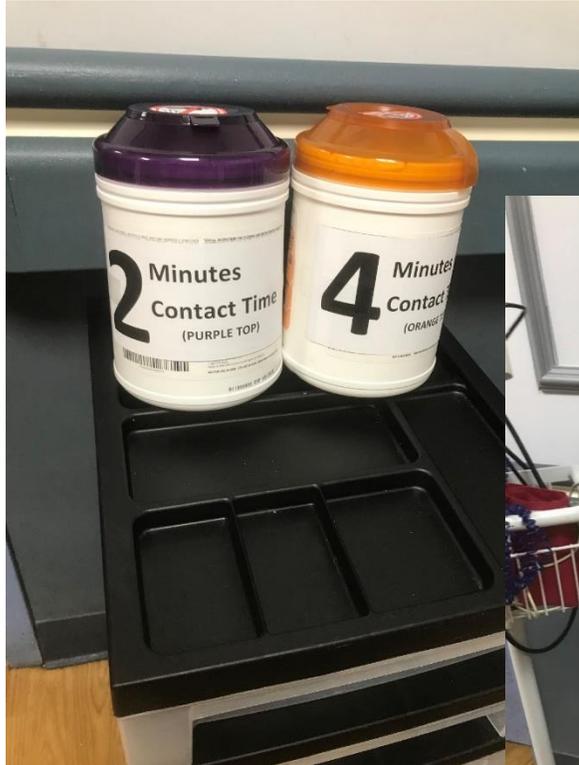


The Set-Up: Hand Hygiene

- Ensure access to alcohol-based hand rub at every resident room
- Ideally located both inside and outside of room
- Make performing hand hygiene easy!



Cleaning & Disinfection of Shared Equipment



- Ensure access to cleaning supplies/wipes
- Contact Precautions: dedicated equipment

Auditing Practices and Education

- Incorporate **periodic monitoring and assessment of adherence** to determine need for additional training and education



Ongoing Activities and Future Steps

- Development of additional resources to promote EBP (e.g., FAQs)
- Collaborating with nursing home organizations to evaluate staff education and training, PPE utilization, and other resource needs for successful implementation
 - Will include assessments of acceptability and costs
- Funding projects to evaluate strategies to prevent MDRO transmission
 - Efficacy of targeted gown/glove use; role of Chlorhexidine bathing and decolonization; Impact of improved environmental cleaning/disinfection
- Establishing a Working Group to convene nursing home, academic and public health partners to discuss broader implementation of EBP outside of a containment response

Resources

- [Interim Guidance to Contain Novel MDROs](#)
 - <https://www.cdc.gov/hai/containment/guidelines.html>
- [CDC Candida auris webpage](#)
 - <https://www.cdc.gov/fungal/diseases/candidiasis/candida-auris.html>
- [Find your state HAI Coordinator and AR expert](#)
 - <https://www.cdc.gov/hai/state-based/index.html>
- [Enhanced Barrier Precautions Guidance](#)
 - <https://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html>



Thank you!
Questions?

Nursing Homes and Assisted Living (Long-term Care Facilities [LTCFs])



Nursing homes, skilled nursing facilities, and assisted living facilities, (collectively known as long-term care facilities, LTCFs) provide a variety of services, both medical and personal care, to people who are unable to manage independently in the community. Over 4 million Americans are admitted to or reside in nursing homes and skilled nursing facilities each year and nearly one million persons reside in assisted living facilities. Data about infections in LTCFs are limited, but it has been estimated in the medical literature that:

- 1 to 3 million serious infections occur every year in these facilities.
- Infections include urinary tract infection, diarrheal diseases, antibiotic-resistant staph infections and many others.
- Infections are a major cause of hospitalization and death; as many as 380,000 people die of the infections in LTCFs every year.



CLINICAL STAFF INFORMATION

Fact sheets, guidelines, reports, and resources

RESIDENT INFORMATION

Fact sheet, patient safety and other information

PREVENTION TOOLS

Checklists, fact sheet, toolkits, and additional links



[The Core Elements of Antibiotic Stewardship for Nursing Homes](#)



The Department of Health and Human Services has developed a strategy to address infections in Long-term Care Facilities in Phase 3 of the [National Action Plan to Prevent Health Care-Associated Infections: Road Map to Elimination](#) [↗](#)

[Nursing Homes and Assisted Living \(Long-term Care Facilities \[LTCFs\]\)](https://www.cdc.gov/longtermcare/index.html)

<https://www.cdc.gov/longtermcare/index.html>

To Ask a Question

- ❑ **Using the Webinar System**
 - Click on the **Q&A** button in the Zoom webinar system.
 - Type your question in the **Q&A** box.
 - Submit your question.
 - Please do not submit a question using the chat button.
- ❑ **For media questions, please contact CDC Media Relations at 404-639-3286 or send an email to media@cdc.gov.**
- ❑ **If you are a patient, please refer your questions to your healthcare provider.**

Today's webinar will soon be available on demand

When: A few days after the live call

What: Video with closed captioning

Where: On the COCA Call webpage at:

https://emergency.cdc.gov/coca/calls/2019/callinfo_102419.asp

Continuing Education for this COCA Call

All continuing education (CME, CNE, CEU, CECH, ACPE, CPH, and AAVSB/RACE) for COCA Calls are issued online through the [CDC Training & Continuing Education Online system](http://www.cdc.gov/TCEOnline/) (<http://www.cdc.gov/TCEOnline/>).

Those who participated in today's COCA Call and who wish to receive continuing education should complete the online evaluation by **November 25, 2019** with the course code **WC2922**.

Those who will participate in the on demand activity and wish to receive continuing education should complete the online evaluation between **November 25, 2019** and **November 26, 2021** and use course code **WD2922** .

Continuing education certificates can be printed immediately upon completion of your online evaluation. A cumulative transcript of all CDC/ATSDR CEs obtained through the CDC Training & Continuing Education Online System will be maintained for each user.

Upcoming COCA Call

Topic: Updated Guidance for Using Intravenous Artesunate for Treating Severe Malaria in the United States

Date: Tuesday, December 10, 2019

Time: 2:00-3:00 p.m. ET

COCA Products & Services

		COCA Call
		CDC Clinician Outreach and Communication Activity

COCA Call Announcements contain all information subscribers need to participate in COCA Calls. COCA Calls are held as needed.

		COCA Learn
		CDC Clinician Outreach and Communication Activity

Monthly newsletter that provides information on CDC training opportunities, conference and training resources, the COCA Partner Spotlight, and the Clinician Corner.

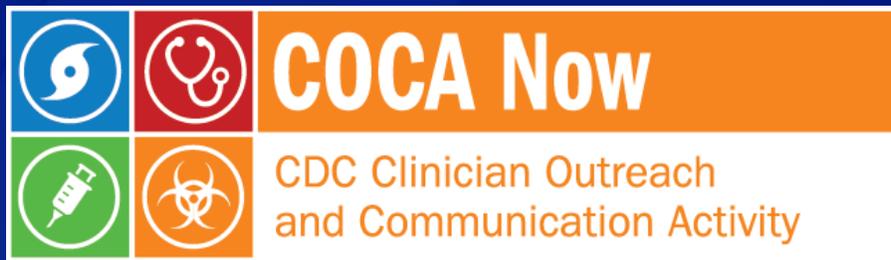
		Clinical Action
		CDC Clinician Outreach and Communication Activity

As-needed messages that provide specific, immediate action clinicians should take. Contains comprehensive CDC guidance so clinicians can easily follow recommended actions.

COCA Products & Services



Monthly newsletter that provides updates on emergency preparedness and response topics, emerging public health threat literature, resources for health professionals, and additional information important during public health emergencies and disasters.



Informs clinicians of new CDC resources and guidance related to emergency preparedness and response. This email is sent as soon as possible after CDC publishes new content.



CDC's primary method of sharing information about urgent public health incidents with public information officers; federal, state, territorial, and local public health practitioners; clinicians; and public health laboratories.

Join COCA's Mailing List!

Receive information about:

- Upcoming COCA Calls
- Health Alert Network (HAN) messages
- CDC emergency response activations
- Emerging public health threats
- Emergency preparedness and response conferences and training opportunities



<http://emergency.cdc.gov/coca>

Join Us on Facebook



COCA

CDC Clinician Outreach and Communication Activity - COCA ✓
@CDCClinicianOutreachAndCommunicationActivity

Home
About
Posts
Photos
Events
Community
[Create a Page](#)

Liked Following Share ... [Sign Up](#)

Status [COCA](#)
Write something on this Page...

Posts

COCA CDC Clinician Outreach and Communication Activity - COCA shared their event.
October 31 at 1:18pm · 🌐

Clinicians, you can earn FREE CE with this COCA Call! Join us for this COCA Call November 7, 2017 at 2:00PM.

Government Organization in Atlanta, Georgia

Community [See All](#)
👍 21,420 people like this
📶 21,217 people follow this

About [See All](#)

A map snippet showing the location of the CDC in Atlanta, Georgia, with a red pin. Street names visible include Clifton Rd. NE and Houston St.

📍 1600 Clifton Rd NE
Atlanta, Georgia 30333

Thank you for joining us today!



**Centers for Disease Control
and Prevention
Atlanta, Georgia**

<http://emergency.cdc.gov/coca>