

Ask an IP

Learning and Communication Series

MDRO Review and Updates
March 11, 2026
(Wednesday)

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Acute Communicable Disease Control (ACDC) Program
Los Angeles County Department of Public Health





Disclosures

There is no commercial support for today's call

Neither the speakers nor planners for today's call have disclosed any financial interests related to the content of the meeting

This call is meant for healthcare facilities and is off the record and reporters should log off now



Housekeeping

- **Microphones** are disabled. For questions, please use the chat.
- **Cameras:** please keep them turned off during the presentation.
- **Recording:** the presentation is being recorded and will be posted on the Ask an IP Website within a week following the session.
- We will not review COVID-19 guidelines (including CDPH AFLs) during these sessions.



LACDPH Infection Prevention Team

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Contact Us: LACSNF@ph.lacounty.gov

Website:

<http://publichealth.lacounty.gov/acd/AskAnIPProgram/index.htm>



Questions

If you have any questions, please hold on to them until the Q & A portion at the end of the session.

Some of your questions that arise throughout the presentation may be answered during the presentation.

Thank you 😊



Objectives

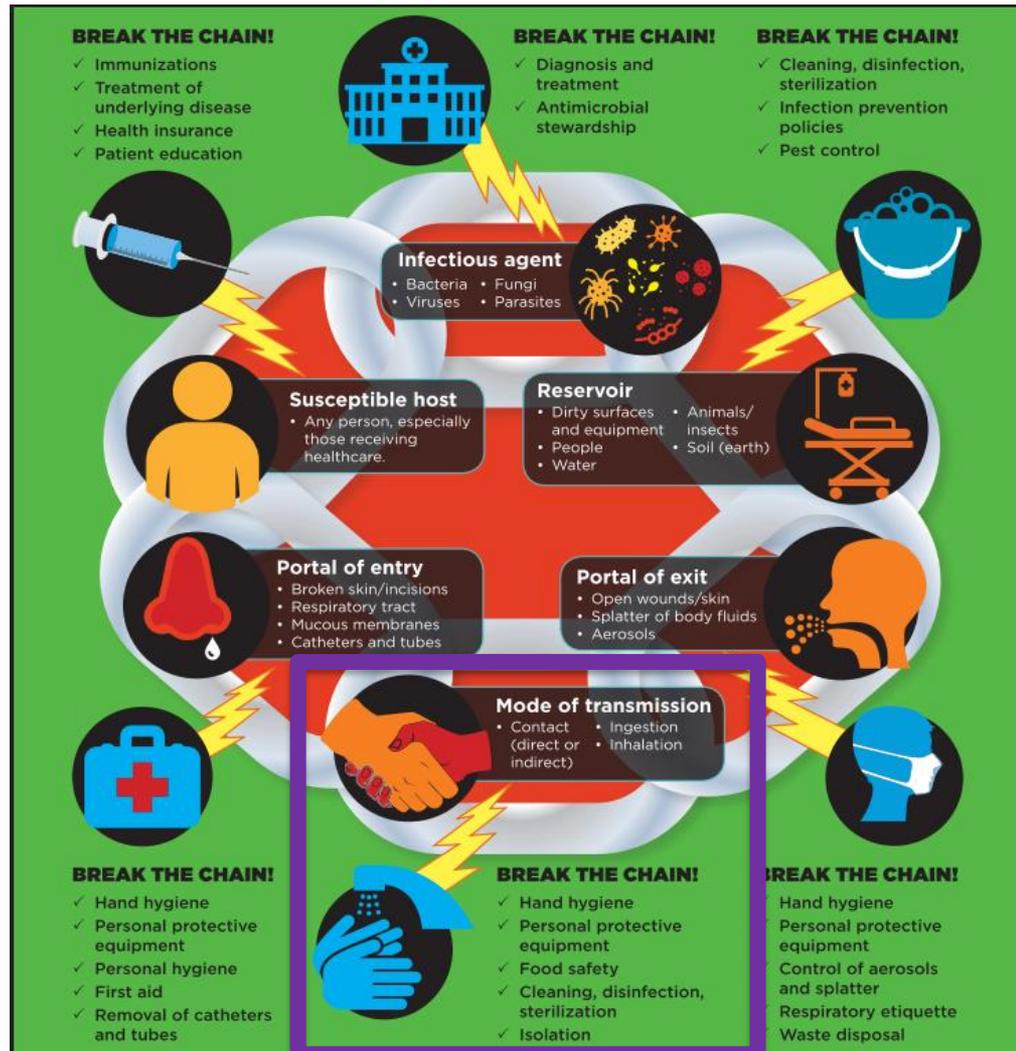
- Explain when to start and/or discontinue transmission-based precautions (TBP) for MDROs specifically carbapenem-resistant organisms (CROs), *Candida auris* (C. auris), and carbapenemase-producing organisms (CPOs)
- Review how to decide what TBP to implement for each MDRO.
- Review how to cohort MDROs.



What is Transmission-Based Precautions (TBP)?

- The second tier of basic infection control used in addition to standard precautions.
- Used for patients who may be infected or colonized with certain infectious agents for which additional precautions are needed to prevent transmission.
 - Should be implemented when there is a suspicion of infectious disease (e.g., while pending results)
- Determined by **mode of transmission** of the organism
 - Does not change if the patient has an active infection or is colonized (i.e., is the same for all specimen sources)

Breaking the chain of infection





Standard Precautions

- Basic practices that apply to all patient care, regardless of a patient's suspected or confirmed infectious state
- Apply to all settings where care is delivered
- Protect healthcare personnel and prevent healthcare personnel or the environment from transmitting infections to other patients
- **Indications:**
 - For common MDROs (MRSA, VRE, ESBL)
 - Residents that do not meet criteria for other TBP

Reassessing MRSA and VRE Contact Precautions

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County of Los Angeles Public Health Acute Communicable Disease Control

ACDC A-Z Index Disease Reporting & Information Toolkits Additional DPH Programs

Rethinking Contact Precautions for Methicillin-resistant *Staphylococcus aureus* (MRSA) and Vancomycin-resistant enterococci (VRE)

Please be sure to refresh your browser to see the latest updates and versions of this webpage. Page updated 3-7-25

Table of Contents

- What are contact precautions?
- Purpose
- Effectiveness for Methicillin-resistant *Staphylococcus aureus* (MRSA) & Vancomycin-resistant Enterococci (VRE)
- Associated Costs and Environmental Impact
- Regulations and Guidance
- What does Los Angeles County (LAC) Department of Public Health (DPH) Recommend?
- Questions and Answers
- LAC DPH MRSA and VRE Contact Precautions Webinar Series
- Resources

Contact Information

- Contact your Liaison Public health Nurse or send an email to HAi@ph.lacounty.gov

What are contact precautions?

Contact precautions are a set of safeguards used by healthcare personnel to prevent the transmission of infectious agents. Contact precautions target infectious agents that are transmitted by direct and indirect contact with the healthcare environment.

Purpose

Standard Precautions	A set of practices used to protect healthcare personnel from potentially infectious material. <ul style="list-style-type: none"> Used for all patient care
Contact Precautions	A set of practices used to protect healthcare personnel from known or suspected infectious material that is transmitted through direct or indirect physical contact. <ul style="list-style-type: none"> Used in addition to Standard Precautions Used for patients with known or suspected infections Used for patients who are colonized with certain antimicrobially important pathogens

Transmission-Based Precautions used for MDROs:

STOP

ALTO

Enhanced Barrier Precautions
 Medidas de Precaución de Barrera Avanzadas
 See nurse before entering the room
 Vea a la enfermera(o) antes de entrar al cuarto

<p>EVERYONE MUST: TODOS DEBEN:</p>	<p>PROVIDERS AND STAFF MUST ALSO: LOS PROVEEDORES Y EL PERSONAL TAMBIÉN DEBEN:</p>
<p>Clean hands on room entry and when exiting Limpiarse las manos antes de entrar y al salir del cuarto</p>	<p>Wear gloves and a gown for the for the high-contact resident care activities below Usar guantes y una bata para las actividades de alto contacto de los residentes a continuación</p>

6 Moments for Enhanced Barrier Precautions
6 Momentos para las Medidas de Precaución de Barrera Avanzadas

<p>1 Activities of daily living (dressing, grooming, bathing, changing bed linens) Actividades de la vida diaria (vestirse, arreglarse, bañarse, cambiar la ropa de cama)</p>	<p>2 Toileting & changing incontinence briefs Ayudar a la persona ir al baño y cambiar la ropa para la incontinencia</p>
<p>3 Caring for devices & giving medical treatments Cuidar dispositivos y dar tratamientos médicos</p>	<p>4 Wound care Cuidado de heridas</p>
<p>5 Mobility assistance & preparing to leave room Asistencia de movilidad y preparación para dejar el cuarto</p>	<p>6 Cleaning the environment Limpiar el ambiente</p>

- Used during high contact care for residents with high-risk characteristics for MDRO colonization and transmission, even if MDRO status is unknown.
- **Indications:**
 - Targeted and endemic MDROs (Tier 2-4)
 - Indwelling device, wounds or pressure ulcer.
- **Parameters:**
 - Residents are not restricted to their rooms
 - Do not require in a private room.

Transmission-Based Precautions for MDROs

STOP

ALTO

Contact Precautions

Medidas de Precaución de por Contacto

See nurse before entering the room

Vea a la enfermera(o) antes de entrar al cuarto



Clean hands on room entry
Límpiese las manos antes de entrar al cuarto



Wear a gown on room entry
Use una bata al entrar al cuarto



Wear gloves on room entry
Use guantes al entrar al cuarto



Clean hands when exiting
Límpiese las manos al salir

Content adapted from UCLA Health Infectious Disease Signs

Los Angeles County Department of Public Health
publichealth.lacounty.gov/acd/SNF.htm
Contact Precaution Rev. 9-9-24




- **Indications:**
 - Novel MDRO (Tier 1 org)
 - Unit/facility experiencing suspected or confirmed transmission
 - Acute diarrhea, draining wounds, or other sites of secretions/excretions that can't be contained/covered.

- **Parameters:**
 - Resident is restricted to their room except for medically necessary activities (unless they are clean, contained, compliant)

Transmission-Based Precautions used for *C-difficile*

STOP
ALTO

Contact & Spore Precautions

Medidas de Precaución por Contacto y Esporas

See nurse before entering the room

Vea a la enfermera(o) antes de entrar al cuarto



**Clean hands
on room entry**
Lávese las manos
al entrar a la
habitación



**Wear a gown
room entry**
Use una bata al
entrar al cuarto



**Wear gloves
on room entry**
Use guantes al
entrar al cuarto

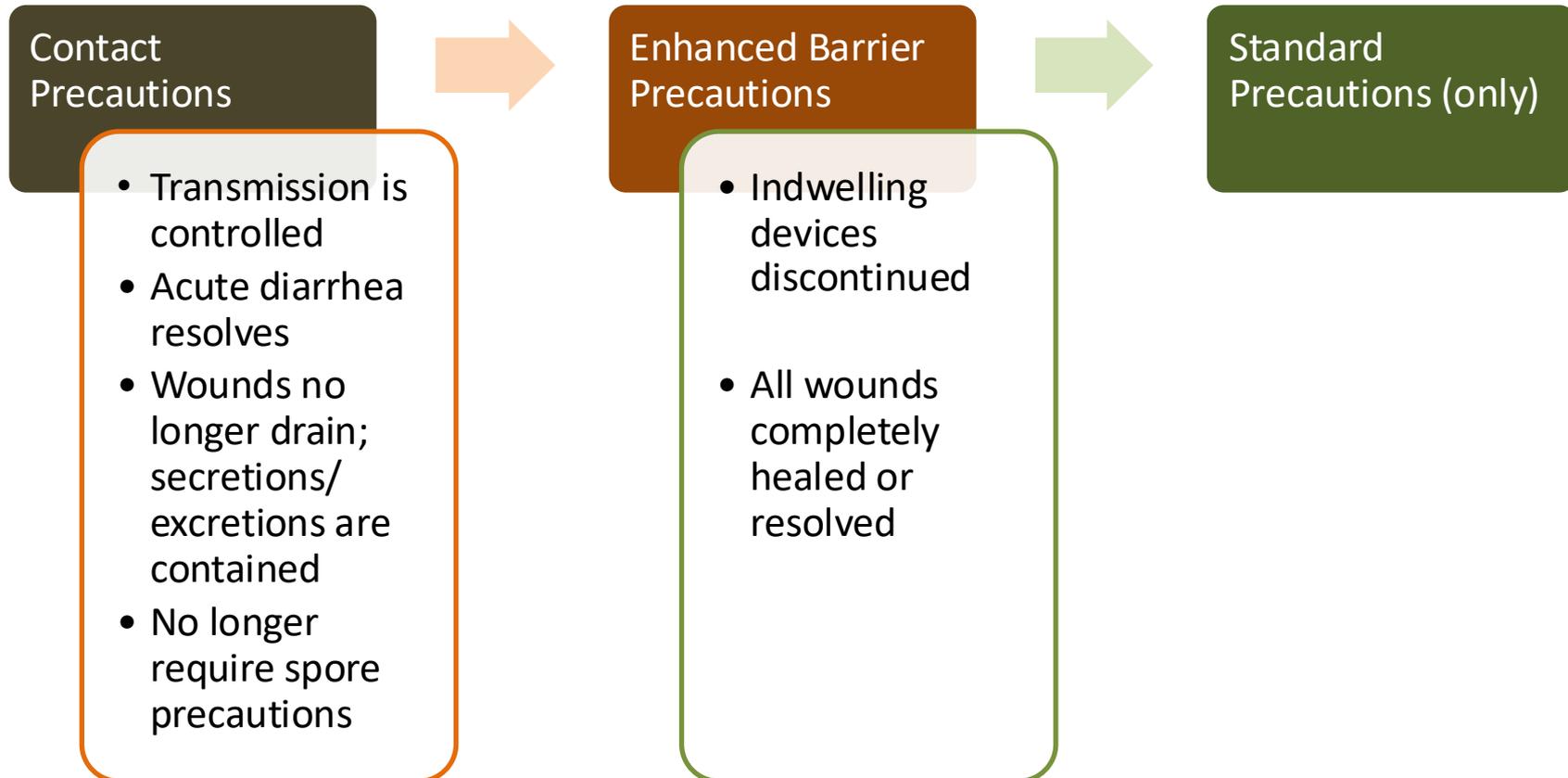


**Clean hands
when exiting**
Lávese las manos
al salir

*Adapted from UCLA Health Infectious Disease Signs

- One of the main risk factors for *C-difficile* infection (CDI) is antibiotic use.
- **Indications:**
 - Confirmed or suspected infections of *C-difficile*, Norovirus, Rotavirus
- **Parameters:**
 - Hand hygiene with soap and water must be used
 - EPA-registered disinfectants with sporicidal claim

When to transition residents on CP to EBP to SP?





Questions:

- A resident on EBP needs assistance on feeding while in the room, do direct care providers need to wear PPE while feeding?
- A resident on EBP needs assistance with feeding in the dining room, do direct care providers need to wear PPE?

Answer: No, feeding is not considered high-contact care. EBP is an extension of Standard Precautions, and PPE should not be worn in the dining room.



Questions:

- A housekeeping/EVS staff needs to clean a room of residents on EBP, do they need to wear PPE when cleaning?
- A resident on EBP needs physical and occupation therapy, do the rehabilitation staff need to wear PPE?
- A resident on EBP needs physical therapy provided in the rehabilitation room, do the rehab staff need to wear PPE?



Questions:

- A housekeeping/EVS staff needs to clean a room of patients on EBP, do they need to wear PPE when cleaning?

Answer: Yes, PPE must be worn and changed between residents.

- A resident on EBP needs physical and occupation therapy, do the rehabilitation staff need to wear PPE?

Answer: Yes, if high-contact care is provided.

- A resident on EBP needs physical therapy provided in the rehabilitation room, do the rehab staff need to wear PPE?

Answer: Rehab staff should NOT wear PPE in the rehab room, but any high contact care provided for the resident, they need to be brought back to resident's room and wear PPE. Remind staff to always perform HH before and after providing any care.



Novel and Targeted MDROs



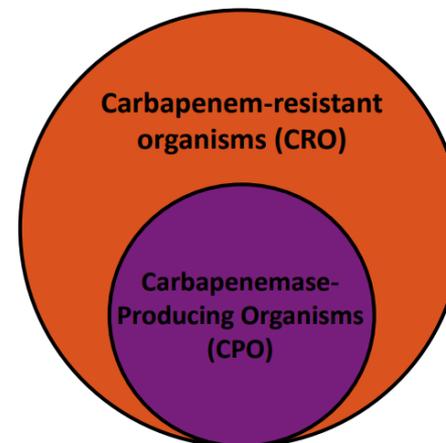
CPO vs Carbapenem-resistant Organisms (CROs)

- **CRO= carbapenem-resistant organism**

- Organism that is resistant (R) to carbapenem antibiotics
 - Meropenem, doripenem, ertapenem, imipenem
- Includes carbapenem-resistant (CR)-
 - Enterobacterales (CRE)
 - *Acinetobacter baumannii* (CRAB)
 - *Pseudomonas aeruginosa* (CRPA)
- This is regardless of having a carbapenemase or not

- **CPO= carbapenemase-producing organism**

- Organism that produces a carbapenemase enzyme
 - Five main types= KPC, IMP, NDM, OXA, VIM
- This is one-way organisms become CR
- Examples: KPC-producing CRE, VIM-producing CRPA, NDM-producing CRAB





Epidemiologically Important MDROs

- Novel MDROs
 - Pan-resistant organisms
- Targeted MDROs
 - Carbapenemase-producing CR Enterobacteriaceae (CP-CRE)
 - Carbapenemase-producing CR *Pseudomonas aeruginosa* (CP-CRPA)
 - Carbapenemase-producing CR *Acinetobacter baumannii* (CP-CRAB)
 - *Candida auris*
- Common MDROs
 - Methicillin-resistant *Staphylococcus aureus* (MRSA)
 - ESBL-producing Enterobacterales
 - Vancomycin resistant *Enterococci* (VRE)

LACDPH MDRO Containment Tiers

http://publichealth.lacounty.gov/acd/docs/LACDPH_MDRO_Tiers_ExternalGuidance.pdf

MDRO Containment Tiers for LA County

LAC Pathogens by Tier

Tier	Description	Pathogens Included
1	Pathogens/resistance mechanisms never or very rarely detected in Los Angeles County (novel MDROs)	<ul style="list-style-type: none"> Novel organism and/or resistance mechanism Pan-resistant gram-negative organism¹
2	Pathogens/resistance mechanisms not commonly detected in Los Angeles County (targeted MDROs)	<ul style="list-style-type: none"> Concerning <i>C. auris</i>² Uncommon carbapenemase-producing <i>Acinetobacter</i> spp.³ Uncommon carbapenemase-producing Enterobacterales⁴
3	Pathogens/resistance mechanisms commonly detected in Los Angeles County but not endemic	<ul style="list-style-type: none"> Carbapenemase-producing <i>Pseudomonas</i> spp.⁵ NDM-producing Enterobacterales
4	Pathogens/resistance mechanisms endemic in Los Angeles County and/or less epidemiologically concerning	<ul style="list-style-type: none"> KPC-producing Enterobacterales <i>C. auris</i> OXA-23-like-producing <i>Acinetobacter</i> spp. Vancomycin-resistant <i>Staphylococcus aureus</i> Other MDROs not previously listed

1. Resistant (R) to all drugs tested at public health laboratories (including CDC)

2. Including echinocandin- or pan-resistant *C. auris*

3. Including NDM-, IMP-, VIM-, and KPC-producing *Acinetobacter* spp.

4. Including IMP-, VIM-, and OXA-like producing Enterobacterales

5. Including VIM-, IMP-, NDM-, KPC-, and OXA-like producing *Pseudomonas* spp.

LACDPH MDRO TBP Recommendations for all settings:

Note these recommendations are for the MDRO only and should be implemented for the duration of the current and any future admission. If the resident meets criteria for other TBP (e.g., COVID-19), follow appropriate guidance.

Organism	Acute care hospitals	Nursing homes	Other LTCFs	Dialysis
<i>C. auris</i>	CP	EBP	SP	SP
CROs/CPOs	CP	EBP	SP	SP
<i>C. difficile</i> *	CP	CP	CP	CP
MRSA	SP	SP	SP	SP
VRE	SP	SP	SP	SP
ESBL	SP	SP	SP	SP

**Continue CP until 48-72 hours after diarrhea resolves. Consider continuing CP until CDI treatment is complete, even if diarrhea has resolved. Continue gown & glove use beyond 72 hours for residents who are incontinent or need significant assistance with ADLs.*

<https://www.health.state.mn.us/diseases/cdiff/hcp/ltctoolkit/index.html>



Questions:

- Residents positive for *CR-Acinetobacter baumannii* (CRAB), should they be placed on CP or EBP?
- A resident has a CRE infection which is being treated with antibiotics, should they be placed on CP or EBP?



Questions:

- Residents positive for *CR-Acinetobacter baumannii* (CRAB), should they be placed on CP or EBP?

Answer: EBP. CP is only for residents with diarrhea due to C-diff and/or if your facility has suspected or confirmed transmission of CRAB.

- A resident has a CRE infection which is being treated with antibiotics, should they be placed on CP or EBP?

Answer: EBP. The risk of and mode of transmission is the same regardless of whether the resident has an active infection or not.

New SNF MDRO Guidance



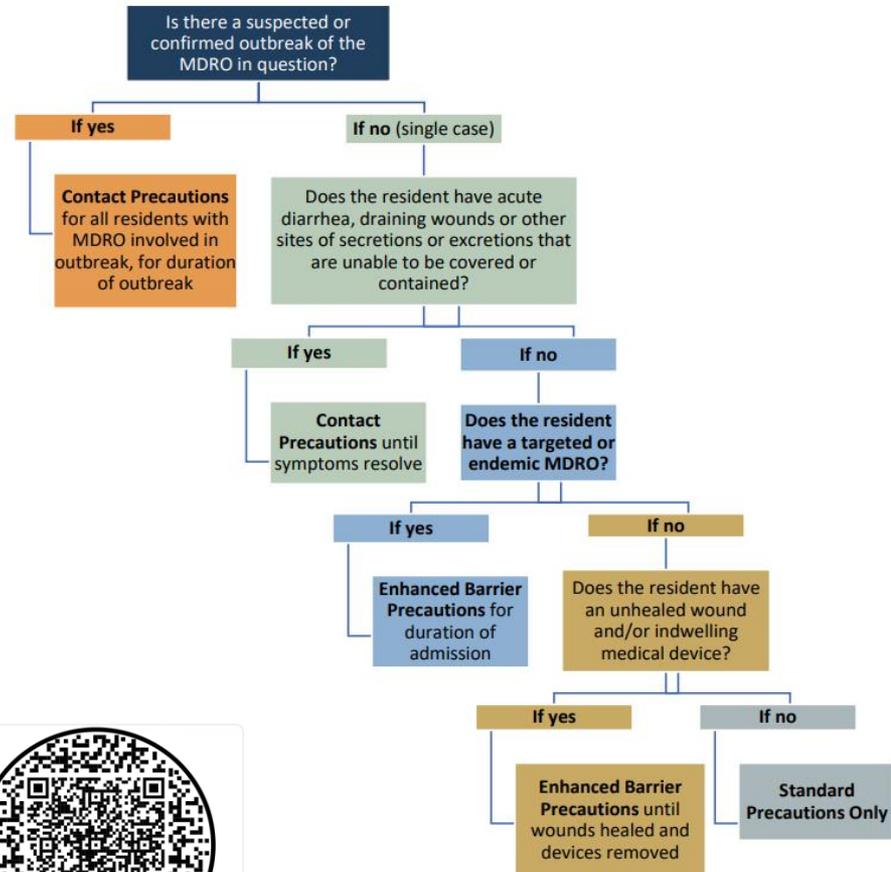
Skilled Nursing Facility (SNF) MDRO Guidance

Los Angeles County Department of Public Health (LAC DPH) Healthcare Outreach Unit




<http://publichealth.lacounty.gov/acd/docs/SNFMDRUGuidance.pdf>

Figure 1: Flowchart to determine appropriate TBP



see page 10 of SNF MDRO guidance



TBP and Cohorting Recommendations by MDRO Type

Organism	TBP Type	How to cohort ⁺
Common MDROs (MRSA, VRE, ESBL)	SP Only	Cohort with anyone (no need to cohort with another resident with the same organism), unless the facility is experiencing an outbreak for which cohorting needs to be prioritized. See LACDPH Rethinking Contact Precautions for MRSA and VRE for more guidance: http://publichealth.lacounty.gov/acd/RethinkingContactPrecautions/index.htm
CPOs	EBP	Cohort only with other residents with the same carbapenemase gene (KPC, IMP, NDM, OXA, VIM), unless there is an outbreak with a targeted MDRO for which cohorting needs to be prioritized. If a SNF is unable to admit or cohort a new MDRO-positive resident due to a lack of a compatible roommate [^] , the new resident can be placed in a room with a non-positive resident with the fewest risk factors for MDRO acquisition.*
CROs	EBP	Cohort only with other residents with the same organism, unless there is an outbreak with a targeted MDRO for which cohorting needs to be prioritized. If a SNF is unable to admit or cohort a new MDRO-positive resident due to a lack of a compatible roommate [^] , the new resident can be placed in a room with a non-positive resident with the fewest risk factors for MDRO acquisition.*
C. auris	EBP	Cohort only with other residents with the same organism unless there is an outbreak with a targeted MDRO for which cohorting needs to be prioritized. If a SNF is unable to admit or cohort a new MDRO-positive resident due to a lack of a compatible roommate [^] , the new resident can be placed in a room with a non-positive resident with the fewest risk factors for MDRO acquisition.*
VRSA	CP	Cohort only with other residents with the same organism.
Novel MDRO	CP	Cohort only with other residents with the same organism.

**Regardless of which type of cohorting is done, ensure that staff treat each bed as a separate room (i.e., perform HH and change PPE between each resident, beds at least 3 feet apart). Additional guidance should be provided when facilities are unable to cohort by same organism/gene. See [Cohorting Considerations](#).*

[^]Compatible roommate = someone with the same MDRO/infectious organism.

+ Resident with the fewest risk factors for MDRO acquisition = resident with the least number of indwelling devices, unhealed wounds, dependence on others for activities of daily living.



Ensure staff adherence to basic IC measures to limit transmission

Room:

Only cohort positive residents with non-positive residents in rooms that can allow for sufficient physical separation.

- Provide 3-6 feet separation with a privacy curtain between beds.
- For rooms with 3+ beds, leave the middle bed empty.
- Treat each bed space within a multi-occupancy room as if it's a separate room.

Adherence:

- **Round the floor regularly observe adherence to HH and PPE use among frontline staff.**
 - Performing HH between each bed space in multi-occupancy rooms.
 - Doffing and re-donning PPE between each bed space in multi-occupancy rooms.
 - Using a fresh set of supplies (microfiber cloth, wipes, mop) for each bed space in multi-occupancy rooms during cleaning and disinfection.



Example scenario – ideal situation

A resident with...	Can be cohorted with a resident with...
KPC-unknown rectal swab	KPC-CRE in urine
CRAB in urine, no signs/symptoms	CRAB in blood, with signs/symptoms
OXA-23 CRAB in urine and C. auris in urine	OXA-23 CRAB in wound and C. auris in axilla/groin swab



Example scenario – alternate situation

A resident with...	Can be cohorted with a resident with...
KPC-unknown organism rectal swab	CRE
CRAB in urine, no signs/symptoms	CROs
OXA-23 CRAB in urine and C. auris in urine	CPOs and/or CROs



Scenario:

A resident is re-admitted to the SNF from the hospital. The resident tested positive for *Candida auris* and was placed on CP at the hospital.

Questions:

- Would you continue to place this resident on CP at the SNF?
- Would you re-test this resident to see if the patient is no longer positive for *C. auris* before you can discontinue isolation precautions?
- Can you cohort this patient in room with a non-positive *C. auris* resident?



Answers:

- Would you continue to place this resident on CP at the SNF?

Answer: No, C.auris positive residents can be managed with EBP.

- Would you re-test this resident to see if the patient is no longer positive for *C.auris* before you can discontinue isolation precautions?

Answer: Re-testing is not recommended. The level of colonization changes over time which can show intermittent positive and negative results.

- Can you cohort this patient in room with a non-positive *C. auris* resident?

Answer: Yes, as long the facility follows best practices to limit transmission. (Table 5 of the SNF MDRO Guidance on page 12)



Sample Cohorting Scenarios





CMS and CDPH Guidance

Center for Clinical Standards and Quality/Quality, Safety & Oversight Group

Ref: QSO-24-08-NH

DATE: March 20, 2024
TO: State Survey Agency Directors
FROM: Director, Quality, Safety & Oversight Group (QSOG)
SUBJECT: Enhanced Barrier Precautions in Nursing Homes

Memorandum Summary

- CMS is issuing new guidance for State Survey Agencies and long term care (LTC) facilities on the use of enhanced barrier precautions (EBP) to align with nationally accepted standards.
- EBP recommendations now include use of EBP for residents with chronic wounds or indwelling medical devices during high-contact resident care activities regardless of their multidrug-resistant organism status.
- The new guidance related to EBP is being incorporated into F880 Infection Prevention and Control.

“All SNFs in compliance with the CMS's EBP requirement are able to admit and provide care for residents with MDROs.

Thus, there is no basis for a SNF to refuse admission of a resident based on their need for EBP or MDRO status.

Residents on EBP do not require placement in a single-person room, even when known to be infected or colonized with an MDRO.”

Each SNF should develop an internal policy for how to admit and manage MDRO+ residents.

June 13, 2024

AFL 24-15

TO: Skilled Nursing Facilities (SNF)
General Acute Care Hospitals (GACH) with a SNF Distinct Part (D/P)

SUBJECT: Enhanced Barrier Precautions (EBP)
(This AFL Supersedes AFL 22-21)

AUTHORITY: Title 22 California Code of Regulations (CCR) sections 72523, 72321, and 72515
Title 42 Code of Federal Regulations (CFR) section 483.80

All Facilities Letter (AFL) Summary

- This AFL announces that the California Department of Public Health (CDPH) is retiring its Enhanced Standard Precautions (ESP) guidance document and adopting the Centers for Disease Control and Prevention (CDC's) EBP guidance and terminology.
- CDPH has developed [Enhanced Barrier Precautions: Additional Considerations for California SNFs \(PDF\)](#) for additional guidance on EBP.



Resources:

- CDC Enhanced Barrier Precautions: <https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/PPE.html>
- AHCA Enhanced Barrier Precautions (EBP) FAQ: <https://www.ahcancal.org/Quality/Clinical-Practice/Documents/AHCA%20EBP%20FAQ.pdf>
- CDC Transmission-Based Precautions: <https://www.cdc.gov/infection-control/hcp/basics/transmission-based-precautions.html>
- LAC DPH SNF MDRO Cohorting guidance: <http://publichealth.lacounty.gov/acd/docs/SNFMDRGuidance.pdf>
- LACDPH CPOs for SNFs: <http://publichealth.lacounty.gov/acd/docs/CPO1PagerforSNFs2023.pdf>
- LACDPH CPO FAQ: <http://publichealth.lacounty.gov/acd/docs/CPOFAQs.pdf>
- LACDPH Candida auris for SNF: <http://publichealth.lacounty.gov/acd/docs/C.auris1PagerforSNFs2023.pdf>
- LACDPH MDROs: <http://publichealth.lacounty.gov/acd/mdro/index.htm>
- CDPH CPO website: https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/CRE_InfectionPreventionStrategies.aspx
- CDC webinar explaining CPOs vs carbapenem-resistant organisms (CROs):
 - Slides: https://www.vdh.virginia.gov/content/uploads/sites/174/2022/08/MidAtlantic-Webinar_simplifying-CROs_cleared.pdf
 - Recording: <https://www.youtube.com/watch?v=nS2zU9xdKdA>
- LACDPH Transferring Guidance for MDROs: http://publichealth.lacounty.gov/acd/docs/LACDPH_TransferringGuidanceforMDROs.pdf



Last RHN meeting for this quarter.

Zone 4: West LA, Beverlywood & Metro.

Location: VA Greater Los Angeles

Date: Thursday, March 19th, 2026

Time: 12-2pm

Topic: Transmission-Based Precaution & MDROs.

2 CEUs will be offered for attendance.

Calendar invitations to these regions have been sent for this meeting. Please contact us if you did not receive one and want to attend:

RHN@ph.lacounty.gov

We hope to see some of you there!

REGIONAL HEALTHCARE NETWORK OF LOS ANGELES COUNTY



RHN Meeting Zone 4: March 19th, 2026

(Please note that these are in-person sessions only)

Date: Thursday, March 19th, 2026 from 12-2pm. (Please check your email for a calendar invitation for details on Zone 4/Regions: West LA, Beverlywood and Metro.

Location: VA Greater Los Angeles: 11301 Wilshire Blvd 90073.

Meeting Topic: Transmission-Based Precautions and Multi-Drug Resistant Organisms (MDROs).

Education Units (CEUs) will be offered. The provider is approved by the California Board of Registered Nursing (Provider Number 01429) for 2 contact hours.

Our sessions will feature a presentation and group activity facilitated by **Healthcare Outreach Unit** team. As infection preventionists, and healthcare administrators, your participation will enrich the discussions and overall learning experience.

How to join: An email and calendar invitation has been sent. Please click "yes" to RSVP. If you did not receive an invitation, please contact us at RHN@ph.lacounty.gov.





Questions

