Los Angeles County Department of Public Health (LACDPH)

Carbapenemase-producing Organisms (CPOs) for Skilled Nursing Facilities

CPOs are bacteria that produce carbapenemase enzymes (e.g., KPC, NDM, OXA-48, IMP, VIM). These enzymes inactivate carbapenem antibiotics, such as meropenem. CPOs are a type of carbapenem-resistant organism (CRO) and include *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and bacteria in the Enterobacterales order such as *Escherichia coli* and *Klebsiella pneumoniae*. As the detection of CPOs increases in LA County, all SNFs should become familiar with the key strategies as outlined here to best manage CPO-positive residents.

DO:

- Admit suspect or confirmed CPO-positive residents to the best of your abilities.
- Refer to the <u>CDPH Enhanced Standard Precautions</u> guidance to **determine which type of transmission-based precautions (TBP)** to apply and how to cohort with other residents.
 - o In general, LACDPH recommends the following TBP for CPOs:
 - Contact Precautions if:
 - There is suspected or confirmed transmission of a CPO in the facility, and/or
 - Resident has a Tier 1 or 2 CPO per LACDPH MDRO Containment Tiers, and/or
 - Resident has other indications (e.g., draining wound, acute diarrhea).
 - Enhanced Standard Precautions for high-risk residents (i.e., residents with indwelling devices and/or unhealed wounds) with Tier 3 or 4 CPO per LACDPH MDRO Containment Tiers.
 - Standard Precautions for all other residents with Tier 3 or 4 CPO per LACDPH MDRO Containment Tiers.
- Ensure your facility staff adhere to basic infection control measures to prevent spread. Facility leadership should conduct regular audit and feedback to maintain good compliance. These include:
 - o Practice hand hygiene (HH). Alcohol-based hand rub (ABHR) is effective against CPOs.
 - o Use personal protective equipment (PPE) properly.
 - Thoroughly clean and disinfect the patient care environment and any shared equipment with EPA-approved disinfectants.
- Communicate CPO status upon discharge. Use an <u>inter-facility transfer form</u> and attach relevant labs.
- Flag medical records of CPO-positive residents to place them on appropriate TBP upon future admissions.

DO NOT:

- **Be scared.** CPOs are just like any other multi-drug resistant organism (MDRO) as long as your staff consistently implements basic infection control practices (see above), you have a strong chance at preventing spread.
- Refuse residents based purely on CPO status. If your facility can provide the care needed, you should admit.
- **Re-screen residents** with history of CPO positive tests for clearance. CPOs can colonize residents for years and may test intermittently negative. Consider them as positive even if they had a recent negative screen result.
- Request facilities perform CPO screening prior to discharge. Since results can take a few days, there is a chance they may acquire CPO between when the swab was collected to when they are discharged.

ADDITONAL RESOURCES

- LACDPH CPO website: publichealth.lacounty.gov/acd/Diseases/CPO.htm
- CDPH CPO and CRO website: cdph.ca.gov/Programs/CHCQ/HAI/Pages/CRE InfectionPreventionStrategies.aspx
- CDC Overview of CPOs vs CROs: publichealth.lacounty.gov/acd/docs/CDCMidAtlanticWebinarSimplifyingCROs.pdf
- LACDPH Transfer Guidance for MDROs: publichealth.lacounty.gov/acd/docs/LACDPH TransferringGuidanceforMDROs.pdf

More questions or concerns? Email the LACDPH Healthcare Outreach Unit at hai@ph.lacounty.gov

