



## County of San Diego Multi-Drug-Resistant Organism Tier List and Guidance

For reporting: Contact COSD Epidemiology/Healthcare-associated Infections Program at:  
 (619) 692-8499 or fax CMR to (858) 715-6458  
 Inquiries: PHS.HAI.HHSA@sdcounty.ca.gov

| Tier          | Tier Description  | List of MDROs  | Public Health Procedure  | Transmission-Based Precautions Guidance <sup>1</sup>     |  |  |  |
|---------------|---|--|--|--|--|--|--|
|               |   |  |  | Long-Term and Short Stay Acute Care Hospitals            | Skilled nursing facilities (SNF)<br>[Ventilator SNF or non-Ventilator SNF] | Acute Rehab Unit   | Residential Care Facilities or Assisted Living Facilities                          |
| <b>Tier 1</b> | Pathogens or resistance mechanisms that are <b>never or very rarely</b> detected in COSD.<br>(With COSD consultation) | <ul style="list-style-type: none"> <li>Novel Resistant Organisms</li> <li>Novel Resistance mechanism</li> <li>Novel Pan-resistant organism</li> <li><i>Candidozyma auris</i> – echinocandin resistant</li> </ul>     | <ul style="list-style-type: none"> <li>Public health investigation with review of epidemiologic information, medical records, and contact tracing.</li> <li>Isolates (2) should be submitted to COSD PHL for additional testing.</li> </ul>                | Contact Precautions until further public health guidance | Contact Precautions until further public health guidance                   | Contact Precautions until further public health guidance | Public health will provide additional guidance.                                    |
| <b>Tier 2</b> | Pathogens or resistance mechanisms <b>periodically</b> detected in COSD.  | <ul style="list-style-type: none"> <li>CP-CRE that is <b>not</b> KPC or NDM</li> <li>CP-CRAB that is <b>not</b> OXA-23 or OXA 24/40</li> <li>CP <i>Pseudomonas spp.</i></li> <li><i>Candidozyma auris</i></li> </ul> | <ul style="list-style-type: none"> <li>Public health investigation with review of epidemiologic information, medical records, and contact tracing.</li> <li>Isolates (2) should be submitted to COSD PHL for additional testing.</li> </ul>                | Contact Precautions (4)                                  | Enhanced Barrier Precautions (6)<br>Contact Precautions (6)                | Contact Precautions (4)                                  | Use gowns and gloves during close prolonged contact and for any medical procedure. |
| <b>Tier 3</b> | Pathogens or resistance mechanisms <b>routinely</b> detected in COSD.   | <ul style="list-style-type: none"> <li>KPC CP-CRE</li> <li>NDM CP-CRE</li> <li>OXA-23 CP-CRAB</li> <li>OXA-24/40 CP-CRAB</li> <li>CRAB with unknown CP status (7)</li> </ul>   | <ul style="list-style-type: none"> <li>Unusual epidemiology (3), increase in cases, or suspected clusters or outbreaks would prompt additional public health investigation.</li> <li>Isolates (2) should be submitted to COSD PHL upon request.</li> </ul> | Contact Precautions (4)                                  | Enhanced Barrier Precautions (6)<br>Contact Precautions (6)                | Contact Precautions (4)                                  | Use gowns and gloves during close prolonged contact and for any medical procedure. |
| <b>Tier 4</b> | Pathogens or resistance mechanisms <b>endemic</b> in COSD.  | <ul style="list-style-type: none"> <li>Multi-drug-resistant <i>Pseudomonas aeruginosa</i> (7)</li> <li>ESBL-producing organisms</li> <li>MRSA</li> <li>VRE</li> </ul>  | <ul style="list-style-type: none"> <li>Unusual epidemiology (3) increases in cases, or suspected clusters or outbreaks may prompt public health investigation.</li> <li>Isolates (2) may be requested by public health.</li> </ul>                         | Contact Precautions with considerations (4), (5), (7)    | Follow facility policies (5), (6)  | Contact Precautions with considerations (4), (5), (7)    | No special precautions. Use gown & gloves for any medical procedure.               |

### NOTES

- Standard Precautions is implicit for all patient care activities; consider use of additional PPE based on facility policy, clinical presentation, and colonization site of MDRO.
- Contact COSD HAI Program for isolate submission logistics and pathogen/resistance criteria.
- Unusual epidemiology includes travel history or atypical patient populations (e.g., pediatrics).
- CDPH Guidance for Short-stay Acute Care Hospitals on the Duration of Contact Precautions for patients with CPO: [www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/ContactPrecautionsDurationCRO.pdf](http://www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/ContactPrecautionsDurationCRO.pdf)
- Data supporting the use of contact precautions as a way of preventing MRSA and VRE transmission in non-outbreak healthcare settings are mixed:
  - SHEA/IDSA/APIC Practice Recommendation: <https://doi.org/10.1017/ice.2023.102>
  - LA County: [www.publichealth.lacounty.gov/acd/RethinkingContactPrecautions/index.htm](http://www.publichealth.lacounty.gov/acd/RethinkingContactPrecautions/index.htm)
- Enhanced Barrier Precautions (EBP): CDC: [www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/faqs.html](http://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/faqs.html)
- CDPH CPO Quick sheet: [www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/CPOQuicksheet\\_Only.pdf](http://www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/CPOQuicksheet_Only.pdf)

### KEY

|             |  |             |  |
|-------------|--|-------------|--|
| <b>APIC</b> | <a href="http://www.apic.org/">Association for Professionals in Infection Control &amp; Epidemiology</a> | <b>KPC</b>  | Klebsiella pneumoniae carbapenemase  |
| <b>CDC</b>  | <a href="http://www.cdc.gov/">Centers for Disease Control &amp; Prevention</a>                           | <b>MDRO</b> | Multidrug Resistant Organism   |
| <b>CDPH</b> | <a href="http://www.cdph.ca.gov/">California Department of Public Health</a>                             | <b>MRSA</b> | Methicillin Resistant <i>Staphylococcus aureus</i>                                       |
| <b>COSD</b> | <a href="http://www.sdcog.org/">County of San Diego</a>  | <b>NDM</b>  | New Delhi metallo-beta-lactamase   |
| <b>CP</b>   | Carbapenemase-producing  | <b>PHL</b>  | <a href="http://www.phl.org/">Public Health Laboratory</a>                               |
| <b>CRAB</b> | Carbapenem-resistant <i>Acinetobacter baumannii</i>  | <b>OXA</b>  | Oxacillinase   |
| <b>CRE</b>  | Carbapenem-resistant Enterobacterales  | <b>SHEA</b> | <a href="http://www.shea-online.org/">Society for Healthcare Epidemiology of America</a> |
| <b>ESBL</b> | Extended-Spectrum Beta-Lactamase-producing   | <b>VRE</b>  | Vancomycin Resistant Enterococci   |
| <b>IDSA</b> | <a href="http://www.idsociety.org/">Infectious Diseases Society of America</a>                           |             |  |