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## HEALTH OFFICER ORDER NO. 25-02

### Health Officer Order for Reporting Carbapenem-Resistant Organisms (CROs)

Effective, November 3, 2025, pursuant to my authority under California Health and Safety Code Section 120175 and California Code of Regulations, Title 17, Sections 2500 and 2505, I hereby order licensed health care providers and laboratories to report human cases of carbapenem-resistant organisms (CROs) in Alameda County residents, including carbapenem-resistant *Enterobacterales* (CRE), carbapenem-resistant *Acinetobacter baumannii* (CRAB), and carbapenem-resistant *Pseudomonas aeruginosa* (CRPA), as defined below, to the Alameda County Public Health Department (ACPHD). For the purposes of this order, human cases include both infection and colonization with CROs. In addition, I hereby order submission of microbiologic isolates by laboratories for specified CROs, as defined below, to the Alameda County Public Health Laboratory (ACPHL). Reporting instructions and further guidance are detailed below.

The Alameda County Health Officer Order dated June 13, 2017, requiring health care providers and clinical laboratories to report all cases of CRE to ACPHD and submit associated specimens to ACPHL is hereby rescinded and replaced with this order.

#### Providers must report CRO cases meeting the following criteria to ACPHD:

- **For CRE:** resistance to any carbapenem antimicrobial, with a MIC of  $\geq 4$   $\mu\text{g/ml}$  for doripenem, imipenem, or meropenem; or MIC  $\geq 2$   $\mu\text{g/ml}$  for ertapenem; **OR**
- **For CRAB:** resistance to any carbapenem antimicrobial, with a MIC of  $\geq 8$   $\mu\text{g/ml}$  for doripenem, imipenem, or meropenem **OR**
- **For CRPA:** resistance to any carbapenem antimicrobial, with a MIC of  $\geq 8$   $\mu\text{g/ml}$  for doripenem, imipenem, or meropenem **AND** nonsusceptible (intermediate or resistant MIC  $\geq 16$   $\mu\text{g/ml}$ ) to cefepime or ceftazidime, or, resistant to ceftolozane/tazobactam (MIC  $\geq 16/4$   $\mu\text{g/ml}$ ); **OR**
- **For any CRO:** Documented carbapenemase production, demonstrated using a phenotypic CLSI-endorsed or FDA cleared test (modified Hodge, Carba-NP, metallo- $\beta$ -lactamase, etc.); **OR**
- **For any CRO:** demonstrated to possess a carbapenemase gene (such as KPC, NDM, VIM, IMP, OXA-48-type) using a CLSI-endorsed or FDA cleared test (Carba-R, PCR, Whole Genome Sequencing, etc.)

#### Laboratories must submit CRO microbiologic isolates meeting the following criteria to ACPHL:

- The isolate is CRAB, regardless of carbapenemase test results OR
- The isolate has not already undergone carbapenemase testing at a facility or commercial laboratory OR
- The isolate had a positive phenotypic test, but a specific carbapenemase was not identified OR
- The isolate is pan-nonsusceptible (intermediate or resistant to all drugs tested to date) OR
- The isolate is specifically requested by the public health department OR
- The isolate belongs to an Alameda County resident residing in a LTCF or SNF

This Order shall remain in effect until rescinded by the Health Officer. These Alameda County Health Officer Order reporting requirements supplement California Department of Public Health reporting requirements under California Code of Regulations, Title 17, Sections 2500 and 2505.

## **Carbapenem-Resistant Organism (CROs) Information and Reporting Guidance**

### **Rationale for Order:**

ACPHD and ACPHL are working to control the spread of CROs in Alameda County. On June 13, 2017, ACPHD issued a Health Officer Order requiring providers and clinical laboratories to report carbapenem-resistant *Enterobacteriales* (CRE) cases, which are a subset of CROs, and requiring clinical laboratories to submit clinical isolates of CREs. Since then, CRO surveillance needs have evolved due to increases in cases and advances in identification of carbapenemase genes at healthcare facilities. While the California Department of Public Health (CDPH) mandated laboratory reporting of carbapenemase-**producing** organisms in 2022 (California Code of Regulations, Title 17, Section 2505), there is still a CPO surveillance gap in Alameda County as not all healthcare facilities can test for carbapenemase genes. This Order goes beyond the CDPH mandate to include reporting of **all** CROs and requires isolate submission when the carbapenemase-producing status is unknown or only confirmed through phenotypic testing. This Order will allow ACPHD to close this gap in surveillance and help prevent transmission of CROs in our dynamic patient population.

CROs, including CREs, are a group of bacteria resistant to a powerful and important class of antibiotics called carbapenems. CRO infections are difficult to treat and can cause serious illness, hospitalization and death. CROs can spread from person to person in health care settings, and the genes that confer resistance to carbapenem antibiotics can also spread between bacteria. The Centers for Disease Control and Prevention has designated CRE, carbapenem-resistant *Acinetobacter* (CRAB), and carbapenem-resistant *Pseudomonas aeruginosa* (CRPA) as urgent or serious drug-resistant threats in the United States. During 2019-2022, rates of hospital-onset CRE, CRAB, and CRPA have continued to increase<sup>1</sup>.

With 12 acute care hospitals, 1 long-term acute care hospital, and over 70 skilled nursing facilities (SNFs), Alameda County contains a complex healthcare system which services a population of over 1.6 million people. Interconnected facilities and patient sharing between local health jurisdictions create greater vulnerability for transmission and complex outbreaks as compared to more isolated healthcare systems. Reporting of CROs and sequencing of the associated isolates provides crucial, necessary information required to control the spread of CROs in Alameda County. Provider reporting of CRO cases provides valuable information on patient demographics and SNF residential status which has helped ACPHD detect and respond to CRO outbreaks earlier and more efficiently in our dynamic patient population. Provider reporting specifically helps ACPHD identify and interrupt chains of transmission between healthcare facilities and provides information on patients who may be moving between different SNFs and acute care hospitals. Sequencing associated isolates has helped ACPHD identify and interrupt chains of transmission. Using this information, ACPHD provides guidance and support to our healthcare facilities, including best practices for transferring, discharging, and cohorting patients who are colonized with a CRO. ACPHD's Health Officer Order goes beyond CDPH's requirement of laboratories reporting only CPOs in order to support our local healthcare facilities that may not have the infrastructure or capacity to test for carbapenemase genes. By requiring the submission of all CRO isolates with unknown carbapenemase-producing status, ACPHD is

filling in a known gap in infection prevention and control and working to limit the public health impact of these pathogens.

**Reporting Instructions:**

This order applies to CRO cases in residents of Alameda County, including all Alameda County LTCF residents, involving all specimen types (both clinical and surveillance cultures), collected from any anatomic site, and submitted by any health care facility type or setting, including, but not limited to, acute care hospitals, long-term care facilities, and outpatient settings.

Health care providers shall report CRO cases to ACPHD by faxing or electronically submitting a Confidential Morbidity Report (CMR) to 510-273-3744 within one working day of receiving the laboratory diagnosis. The CMR should include (per CCR Title 17, Section 2500):

- Name of the disease (CRE, CRAB, CRPA), with the bacterial species identified, if it is known to produce a carbapenemase, and if so, the specific carbapenemase
- Case's name, address, telephone number, occupation, race/ethnic group, sex, age, date of birth, and if they are known to reside in a high-risk or congregate setting
- Date of illness onset, if symptomatic
- Date of diagnosis
- Date of death if applicable
- Name, address, and telephone number of the person making the report

Health care providers shall include with the CMR a copy of the laboratory test results and the California Department of Public Health (CDPH) Interfacility Infection Control Transfer form, if/when the patient is transferred to another facility.

Laboratories shall report CRO cases to ACPHD by faxing or electronically submitting a CMR to 510-273-3744 within one working day of identification and report test results to the ordering provider. Laboratories may report electronically via the California Reportable Disease Information Exchange (CalREDIE) system only if they are able to selectively report cases that meet the CRO case definition and can provide required data elements electronically. Results shall be reported for bacterial culture, antimicrobial susceptibility, carbapenemase production, and specific carbapenemase gene detection. Reports should include (per CCR Title 17, Section 2505):

- Patient name, gender, address, telephone number (if known), race, ethnicity, and date of birth
- Patient identification number
- Ordering health care provider name, address, telephone number
- Specimen accession number or another unique specimen identifier
- Specimen collection date
- Laboratory findings for the test performed
- Date that positive laboratory findings were identified

Healthcare providers may be contacted by ACPHD staff requesting additional demographic and clinical information on both provider- and laboratory-reported cases. Disclosures to public health

authorities for public health activities without obtaining prior patient consent is permitted under the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule, 65 F.R. §164.512(b).

For questions about reporting requirements, specimen handling, or for additional information, please contact the Acute Communicable Disease Section at (510) 267-3250 or [acuteacd@acgov.org](mailto:acuteacd@acgov.org). We greatly appreciate your assistance in our joint efforts to protect the health of the residents of Alameda County.



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Nicholas Moss, MD, MPH  
Health Officer, County of Alameda

09/30/2025

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Date

### Resources

- [ACPHD Confidential Morbidity Report Form](#)
- [ACPHD CRE Specimen Submittal Instructions](#)
- [ACPHD CRO Information](#)
- [California Department of Public Health \(CDPH\) CRO Information page](#)

<sup>1</sup><https://www.cdc.gov/antimicrobial-resistance/data-research/threats/index.html>

