



HEALTH ADVISORY
CARBAPENEM RESISTANT *ACINITOBACTER BAUMANII*
April 29, 2021

Background:

Acinitobacter species are a group of bacteria that are ubiquitous in the environment and cause opportunistic infections in humans. *Acinitobacter baumannii* species are particularly pathogenic, causing active infections of the blood, urinary tract, lungs and wounds. This pathogen can also colonize different parts of the body; survive on environmental surfaces for 5 or more months; and be spread among patients in healthcare settings via contaminated surfaces, hands, and shared equipment. Risk factors for colonization or infection include open wounds, presence of indwelling devices including endotracheal tubes, multiple co-morbidities, high antimicrobial use, and prolonged hospital stays.

Acinitobacter species are known to be resistant to many antibiotics, including carbapenems, a class of antibiotics that includes doripenem, ertapenem, imipenem and meropenem, which makes infections with this pathogen difficult to treat. Carbapenem-resistant *A. baumannii* (CRAB) has been associated with hospital-acquired infections and listed as an Urgent Threat by the CDC. Carbapenemase-producing *Acinitobacter baumannii* (CP-CRAB) is additionally concerning for its very high resistance to antibiotics and its ability to transfer resistance genes to other pathogens.

Situation:

Alameda County Public Health Department (ACPHD) has identified one confirmed and two suspected cases of CP-CRAB with a carbapenemase producing New Delhi metallo-β-lactamase (NDM) and oxacillinase-23(OXA-23) genes.

During February 2021, an Alameda County SNF admitted a patient from a hospital in Stanislaus County who screened positive for CRAB on routine surveillance screening on admission for multidrug-resistant organisms. Whole genome sequencing of the isolate conducted at the Alameda County Public Health Laboratory detected a CP-CRAB isolate with an NDM and OXA-23 genes. Since the identification of the confirmed case, ACPHD has been working with the local facility to ensure control measures, including placement of the patient in a private room, contact precautions, and screening of any exposed patients have been implemented. ACPHD continues to monitor surveillance screenings at the facility to prevent the spread of CP-CRAB.

Although we have confirmed a single case in Alameda County, the vast patient exchange networks within and between health jurisdictions presents the possibility of additional undetected cases. In addition, CRAB is currently not a reportable condition under Title 17 of the California Health and Safety Code, which impacts the availability of surveillance data to determine current prevalence. **As a result, ACPHD recommends that all clinicians and laboratorians should be vigilant in identifying, isolating, and responding to detection of a CP-CRAB within their healthcare facility.**

ACTIONS REQUESTED OF CLINICIANS:

1. **TEST for CRAB colonization (via a rectal swab)** on admission for all patients admitted from healthcare facilities in Stanislaus County.
2. **Conduct Screening test (via rectal swab)** of ANY patients currently in an Alameda County long-term care facility who have been admitted from or have a history admission to a healthcare facility in Stanislaus in the past 12 months.
3. **IMPLEMENT PREEMPTIVE CONTACT PRECAUTIONS** until admission screening cultures return negative.
4. **ISOLATE and implement standard and contact precautions** for persons with suspected or confirmed CRAB infection or colonization.
5. **NOTIFY** your facility Infection Preventionist promptly of suspected or confirmed cases, per facility protocols.
6. **REPORT** CRAB infection or colonization within 1 business day of identification.
 - **Reporting cases of an Alameda County Resident or in a healthcare facility in Alameda County health jurisdiction, Fax CMR with laboratory result to 510-273-3744**



Alameda County Health Care Services Agency
Public Health Department
 www.acphd.org

Colleen Chawla, Director
 Kimi Watkins-Tartt, Director
 Nicholas Moss, MD, Health Officer

City of Berkeley Public Health Department
 www.cityofberkeley.info/publichealth

Lisa B. Hernandez, MD, MPH, Health Officer

- **Reporting a case of a Berkeley resident or in the city of Berkeley Health Jurisdiction, fax CMR** with lab results to Fax: 510-981-5345
- 7. **ENSURE and EVALUATE** adherence to hand hygiene, contact precautions, and environmental control measures.
- 8. **COMMUNICATE CRAB infection or colonization status** for patients being transferred or discharged from your facility. Provide a Inter-facility infection control transfer form (<http://www.acphd.org/cre.aspx>) to the receiving facility and fax a copy to ACPHD (510-273-3744) or City of Berkeley Public Health (510-981-5345) as applicable

Alameda County long-term care facilities that have frequent patient admissions from Stanislaus County are advised to consider conducting a point prevalence surveillance testing. Facilities for whom this applies are advised to contact ACPHD to discuss further. Please call 510-267-3250 option 2, M-F 8:30am-5PM

Long-term care facilities within the health jurisdiction may contact the City of Berkeley Communicable Disease Prevention and Control Program at 510-981-5292.

ACTION REQUESTED OF LABORATORIANs:

1. **CONSIDER RETROSPECTIVE REVIEW OF MICROLABORATORY DATA** for the past 12 months to identify previously missed cases of CP-CRAB.
2. **PROSPECTIVELY TRACK AND REPORT CRAB identification to ACPHD.** Send fax of lab result with susceptibility report to ACPHD at 510-273-3744.
3. **SUBMIT ISOLATES OF CRAB to the Alameda County Public Health Laboratory (ACPHL)** for whole genome sequencing analysis.

Resources:

<https://www.cdc.gov/hai/organisms/acinetobacter.html>

<https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/HealthcareProviders.aspx>

Reporting Form: <https://acphd.org/communicable-disease/disease-reporting-and-control/reporting-forms/>