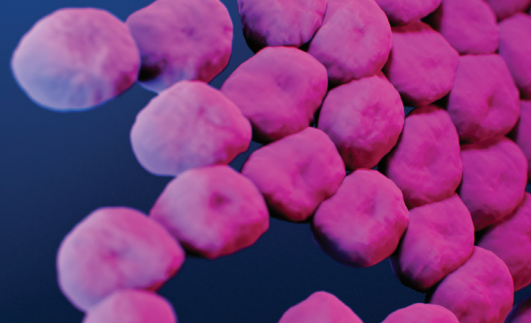


CRAB Carbapenem-resistant *Acinetobacter baumannii*

An Urgent Public Health Threat 



Information for Facilities

Acinetobacter baumannii is a species of bacteria that is an opportunistic pathogen. It can **cause a variety of different types of infections**. Infections caused by carbapenem-resistant *A. baumannii* (CRAB) **don't respond to common antibiotics** and some CRAB are resistant to all available antibiotics.

Large outbreaks of CRAB have been reported in U.S. hospitals and nursing homes.

In the United States, most CRAB produce carbapenemases, enzymes that inactivate carbapenem and other β -lactam antibiotics. There are many different carbapenemases associated with CRAB. **Carbapenemase-producing CRAB has the potential to spread rapidly** and is frequently associated with outbreaks. CRAB is sometimes referred to by the type of carbapenemase genes it is carrying, e.g., OXA-23-producing CRAB or NDM-producing CRAB.

Carbapenemases identified in U.S. CRAB

More Common

- OXA-23-like
- OXA-24/40-like

Less Common

- KPC • NDM • VIM
- IMP • OXA-48-like
- OXA-58-like • OXA-235-like



How does CRAB spread?

CRAB spreads through direct and indirect contact with patients infected or colonized with CRAB or contaminated environmental surfaces and equipment. It is usually transmitted from person to person, often via the hands of healthcare personnel or on contaminated shared medical equipment, like IV poles and blood pressure machines. CRAB can cause large outbreaks in healthcare facilities. Without effective cleaning and disinfection, CRAB can persist in the environment and on medical equipment for days to weeks, even in dry conditions.

Who is at risk?

Hospital patients and long-term care facility residents, especially those who

- Receive complex medical care, including intensive care unit admission or having invasive devices
- Have severe or chronic wounds
- Have recently taken antibiotics
- Were admitted to the same room or unit as a person colonized or infected with CRAB

Anyone who received inpatient medical care or underwent invasive medical procedures outside the U.S. in the past 6 months.

INFECTIONS



COLONIZATION

Colonization

Colonization means that an organism is found in or on the body, but it is not causing any symptoms or disease. CRAB primarily colonizes the digestive tract, respiratory tract, skin, and/or wounds, but can colonize other body sites. Patients may remain colonized with CRAB indefinitely.

Why is colonization important?

Infections represent only a fraction of the burden of CRAB. Many more patients are colonized. Patients who are colonized with CRAB can be a source of spread to other patients. They are also at higher risk of developing CRAB infection than patients who are not colonized. And because patients colonized with CRAB don't have signs or symptoms, CRAB colonization can go undetected and contribute to silent spread of resistant bacteria.

How can we identify colonized patients to stop spread?

Identifying patients colonized with CRAB initiates targeted actions to prevent transmission to other patients. Colonization is detected by a screening test for patients and residents who are at risk of CRAB colonization or infection. **Screening tests are available at no cost through CDC's Antimicrobial Resistance (AR) Laboratory Network.**

How Your Facility Can Prevent the Spread of CRAB



Ensure Timely Identification of Patients Infected or Colonized with CRAB

- Ensure your clinical laboratory can identify CRAB.
- Ask about specialized testing to detect carbapenemase-producing CRAB in clinical cultures and through colonization screening via CDC's AR Lab Network.
- Follow public health recommendations for CRAB colonization screening.
- When transferring a patient colonized or infected with CRAB, notify accepting facilities and units of the patient's CRAB history.
- Work with your health department to understand local CRAB epidemiology.



Perform Hand Hygiene

- Clean your hands immediately before touching a patient, before performing an aseptic task (e.g., placing an indwelling device), before handling invasive medical devices, and before moving from work on a soiled body site to a clean body site on the same patient.
- Clean your hands after touching a patient or the patient's immediate environment; after contact with blood, body fluids, or contaminated surfaces; and immediately after glove removal.

Did you know?

Alcohol-based hand sanitizers are the preferred method for cleaning your hands in most clinical situations.

Wash your hands with soap and water whenever they are visibly dirty, before eating, and after using the restroom.



Wear Gown & Gloves When Caring for Patients with CRAB

CRAB can contaminate your hands and clothes while you care for a patient infected or colonized with CRAB or work in their environment. This puts the patients who you care for afterward at risk of getting CRAB.

- Protect your patients by wearing a gown and gloves for patient care according to the guidelines for your setting (i.e., Contact Precautions in acute care, Enhanced Barrier Precautions in long-term care).
- Don and doff your personal protective equipment (PPE) in the right order and take care not to self-contaminate during doffing.
- Always change your PPE between patients or residents.



Clean & Disinfect Medical Equipment

Medical equipment has been a source of spread in multiple healthcare facility CRAB outbreaks.

- Follow your facility's standardized cleaning/disinfection protocols for the medical equipment you use.
- Dedicate non-critical medical equipment (e.g., stethoscopes, blood pressure cuffs) to CRAB patients whenever possible.
- Ensure shared medical equipment (e.g., portable x-ray machine) is cleaned and disinfected between each patient.



Environmental Cleaning & Disinfection

CRAB can heavily contaminate the healthcare environment and live for weeks on wet and dry surfaces.

- Follow your facility's cleaning and disinfection protocols.
- Use EPA-registered one-step hospital-grade disinfectants and follow the label instructions for proper use of cleaning and disinfecting products (e.g., accurate dilution, sufficient wet contact time, appropriate material compatibility, storage, shelf-life, safe use, and disposal).
- Ensure high-touch surfaces (e.g., bed rails, light switches, call buttons) are cleaned at least daily.

Resources

Learn more about CRAB: www.cdc.gov/HAI/organisms/acinetobacter.html

Contact your HAI Prevention Program: www.cdc.gov/hai/state-based/index.html

About CDC's AR Lab Network: www.cdc.gov/drugresistance/ar-lab-networks/domestic.html

Track carbapenemase-producing CRAB: <https://arpsp.cdc.gov/profile/arln/crab>



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