Resources for Carbapenem-Resistant Organisms (CROs)

Visit: https://www.cdc.gov/drugresistance/pdf/threats-report/2019-ar-threats-report-508.pdf and for more infection prevention and control information, check out: www.infectioncontrolma.org and www.cdc.gov/infectioncontrol/projectfirstline/index.html

Carbapenem antibiotics are an important subset of the β-lactam antibiotics, a versatile group of antibiotics with activity against many gram-positive and gram-negative organisms. Carbapenems are reserved for serious infections and are increasingly important due to the increase in resistance to other antibiotics.

In **CDC's 2019 Antibiotic Threat Report**, Carbapenem-Resistant Acinetobacter and Enterobacterales were deemed **urgent threats.**

Carbapenem-resistant Enterobacterales (CRE)	Carbapenem-resistant *Acinetobacter baumannii* (CRAB)	Carbapenem-resistant *Pseudomonas aeruginosa* (CRPA)
		

General Information

• In the US, approximately 35% of CRE carry a gene for carbapenemase which inactivates carbapenems and other β-lactam antibiotics and can spread rapidly among different strains of bacteria • CRE are carried in the digestive tract of patients and may be transmitted in healthcare facilities	• Infections occur almost exclusively in patients with recent hospitalizations, surgeries, or residence in long term care facilities • Causes a variety of infections: bloodstream, respiratory, and wound • Associated with large regional outbreaks • Allows few treatment options	• Infections usually occur in hospitalized patients or those with weakened immune systems • Some types of multi-drug resistant (MDR) *P. aeruginosa* are resistant to nearly all antibiotics

Patients Who Are at Risk:

• Have trachs or are on ventilators • Have indwelling devices such as catheters, feeding tubes, lines, and drains	• Are in intensive care units • Have prolonged hospital stays	• Have weakened immune systems • Are on long courses of certain antibiotics • Have open wounds

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How Are These Spread?

- These resistant germs can spread from one person to another through contact with **contaminated surfaces, equipment, and the hands of healthcare staff.**
- They can also survive on surfaces for a prolonged period of time if shared medical equipment and high-touch surfaces are not properly cleaned and disinfected.

Infection Prevention and Control Targeted Actions

Use of Enhanced Barrier Precautions (EBP)

- EBP PowerPoint
- Frequently Asked Questions
- EBP Sign (Spanish)
- EBP Sample Script for Staff
- EBP Script for Families

Hand Hygiene

- Hand Hygiene Audit Tool: CDC ICAR tool
- Hand Hygiene in Healthcare Settings
- Watch a Hand Hygiene Webinar

Cleaning and Disinfection

- Watch a Cleaning and Disinfection Webinar
- How to Read a Disinfectant Label infographic
- EVS Front-line Staff Educational Videos
- Selected EPA-Registered Disinfectants

Colonization Screening

- CDC Colonization Screening
- Script for Patient Screening

MDPH MDRO Toolkit

https://www.mass.gov/doc/mdph-mdro-toolkit-0/download