Carbapenem Resistant Organisms (CRO)/ Carbapenemase Producing Organisms (CPO) Fact Sheet

CRO vs. CPO: What's the Difference and Why Do We Care?

Term	Meaning	Key Points
CRO (Carbapenem-Resistant Organism)	Bacteria that are **resistant to carbapenem antibiotics** for any reason	Carbapenems are among our most effective class of antibiotics, so resistance to them is especially concerning, The main carbapenem antibiotics include Imipenem (Primaxin); Meropenem (Merrem); Ertapenem (marketed as Invanz); and Doripenem
CPO (Carbapenemase-Producing Organism)	Bacteria that are **resistant to carbapenem antibiotics AND** that **produce carbapenemase enzymes** making transmission easier.	Able to produce carbapenemase enzymes that **break down** carbapenem antibiotics directly. This mechanism can be more easily transmitted from cell-to-cell and person-to-person. The "big five" genes that infer this ability are: KPC, NDM, VIM, IMP, OXA-48

Major Types of Carbapenem Resistant Organisms (CRO)

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

All of these organisms are also capable of being a CPO (CP-CRE, CP-CRPA, CP-CRAB)

More Information for Healthcare Providers, Patients & Families

Click the links below for more information about:

- CRE Information for Patients & Families: CRE (CDC)
- CRPA Information for Patients & Families: CRPA (CDC)
- CRAB Information for Patients & Families: CRAB (Iowa Dept. of Health)
- CRE Information for Healthcare Providers: CRE Control (CDC)
- CRPA Information for Healthcare Providers: CRPA (CDC)
- CRAB Information for Healthcare Providers: CRAB for Facilities (CDC)

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