

# IDRS Infectious Disease Reporting System

Disease Reporting 24 Hours a Day

Columbus Public Health and Franklin County Public Health

## CARBAPENEMASE-PRODUCING ORGANISMS

CPO, which stands for carbapenemase-producing organisms, are bacteria that antibiotics don't work well against and are difficult to treat. CPO produce an enzyme called carbapenemase that allows the bacteria to break down many of the antibiotics used to treat them, including carbapenem antibiotics.

### Symptoms

- Symptoms can vary by organism and site of infection, and some individuals may have no symptoms.
- CPO can cause pneumonia, bloodstream infections, urinary tract infections, intra-abdominal infections, and surgical site infections, among others.

### Transmission

- CPO bacteria are usually spread from person-to-person, often via contaminated hands.
- Spread can also occur from direct contact with environmental surfaces contaminated with CPO, such as medical equipment that has not been appropriately disinfected.
- CPO can cause infections when they enter the body, often through medical devices like ventilators, IVs, urinary catheters, or wounds from injuries or surgery.
- CPO primarily affect individuals in acute and long-term healthcare settings who are being treated for another condition.
- Use of certain types of antibiotics might also make it more likely for one to get a CPO.
- Healthy individuals usually are not affected.

### Treatment

- CPO infections can be difficult to treat due to their resistance to most antibiotics and has a mortality rate of up to 50% of those hospitalized.
- Available antibiotics to treat the infection are limited but some options are available.
- Strains that have been resistant to all antibiotics are very rare but have been reported.
- Even after treatment, individuals generally remain colonized with CPO for long periods, potentially indefinitely.

### Prevention

- Tell your doctor if you have been hospitalized in another facility or country.
- Take antibiotics as prescribed.
- Expect healthcare providers to wash their hand before or after providing medical care to you. If they do not, ask them to do so.
- Wash your hands often, especially:
  - Before preparing or eating foods
  - Before or after changing wound dressings or bandages
  - After using the bathroom
  - After blowing your nose, coughing, or sneezing
- Take precautions if caring for someone with CPO at home, like careful hand washing, wearing gloves when anticipating contact with body fluids or blood, and not discarding body fluids or human waste in sinks.

**All information is general in nature and is not intended to be used as a substitute for appropriate professional advice.**



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