



Carbapenem-resistant *Pseudomonas aeruginosa* Information for Veterinarians



My Small Animal Patient has been diagnosed with a CRPA, now what?

What is carbapenem-resistant *Pseudomonas aeruginosa* (CRPA)?

- CRPA infections are resistant to drugs such as imipenem and meropenem as well as many other antimicrobials.
- Isolating CRPA has public health implications because CRPA can cause severe infections that are difficult to treat in both pets and people.

Where did my patient get this bacteria?

- *Pseudomonas* is found in the environment and can be normal flora colonizing people and pets.
- *Pseudomonas* grows well in moist environments.
- Pets can acquire CRPA from the environment or from contaminated surfaces or equipment in the clinic. Transmission from a colonized or sick person or pet can occur via direct contact or bodily fluids.
- In pets, infections typically occur when CRPA spread to compromised sites (otitis, wounds, UTIs).

Is there risk to my staff and other patients?

- It is possible to share CRPA between pets and people, but the risk is believed to be low.
- Immunosuppressed veterinary staff and patients should avoid contact with CRPA patients when possible.
- Everyone can reduce spread by washing hands.
- Anyone concerned about CRPA exposure or illness should consult their healthcare provider.

How can I treat my patient?

- Treat infected pets with antibiotics based on culture and susceptibility.
- CRPA infections can be challenging to treat; consult with a pharmacologist, microbiologist, or infectious disease specialist as needed.
- Remove any implants, and drain and clean wounds.
- Consider topical antiseptics/antimicrobials for skin or wound infections (silver sulfadiazine).
- Clean ears thoroughly prior to applying antimicrobials.
- Healthy colonized pets who are not showing signs of illness do not need to be treated for CRPA.

General precautions

- Isolate hospitalized CRPA patients and minimize the number of staff caring for them.
- Wear gloves, gowns, and masks when handling a CRPA patient, cleaning ears/wounds, changing bandages, or handling bodily fluids.
- Wash hands after all contact with CRPA patients.
- Discard contaminated items (e.g., soap containers). Be careful to not cross-contaminate hospital surfaces and equipment.
- Choose a disinfectant effective against *Pseudomonas*, and follow manufacturer guidelines closely (e.g., dilution, storage, contact time).

Where can I find more information?

- Kansas Veterinary Diagnostic Laboratory
(785) 532-5650 <http://www.ksvdl.org/>
- MU Veterinary Medical Diagnostic Laboratory
(573) 882-8367 <https://vmdl.missouri.edu/>
- [CDC: *Pseudomonas aeruginosa*](https://www.cdc.gov/media/releases/2016/s0603-pseudomonas-aeruginosa.html)

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