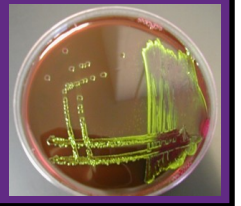




Carbapenem-resistant *Enterobacterales* Information for Equine Veterinarians

My equine patient has been diagnosed with a CRE, now what?



What is carbapenem-resistant *Enterobacterales* (CRE)?

- CRE is a type of bacteria (e.g., *E. coli*, *Klebsiella*) that is resistant to drugs such as imipenem and meropenem, as well as many other antimicrobials.
- Isolating a CRE has public health implications because CRE can cause severe infections that are difficult to treat in both people and animals.

Where did my patient get this bacteria?

- *Enterobacterales* and CRE can colonize the GI tracts of healthy people and horses.
- In horses, infections typically occur when CRE spreads to the lungs, urinary tract or wounds.
- CRE can be spread by contaminated feces, fluids, hands, surfaces or equipment.

Is there risk to my staff and other patients?

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

How can I treat my equine patient?

- CRE infections can be challenging to treat; consult with a pharmacologist, microbiologist, or infectious disease specialist as needed.
- Consider topical antiseptics/antimicrobials.
- Remove any nidus (e.g., implants), and drain and clean wounds.
- There is no evidence for treating healthy horses colonized with CRE.

General precautions

- Isolate hospitalized CRE horses, minimize staff caring for them, wear gloves, coveralls/gowns, masks, and wash hands after contact.
- Do not turn out CRE horses in areas used by non-colonized patients; minimize use of shared tools and space.
- Dispose of manure promptly and disinfect area.
- Conduct procedures on disinfectable floors rather than dirt or grass.
- Follow the manufacturer guidelines for cleaning products (e.g., dilution, storage, contact time). Do not use high-pressure hoses or pressure washes as bacteria can be aerosolized.

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 CRE and Veterinarian Basics](#)
- [PennVet CREATE](#) CRE Plan and Response Resource

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