

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 and urogenital 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 hands, or through feces, bodily fluids, contaminated 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.



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How can I treat my equine patient?

- Do **NOT** screen healthy horses for CRE. Do **NOT** treat colonized horses with no clinical signs; you cannot decolonize a horse.
- CRE 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.

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 patients in areas used by noncolonized 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 State Veterinary Diagnostic Laboratory (785) 532-5650 <u>http://www.ksvdl.org/</u>
- MU Veterinary Medical Diagnostic Laboratory (573) 882-8367 <u>https://vmdl.missouri.edu/</u>
- CDC FAQs about CRE for Veterinarians <u>https://www.cdc.gov/hai/organisms/cre/FAQ-Vets.html</u>
- <u>PennVet CREATE</u> CRE Plan and Response Resource



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