

Methicillin-Resistant *Staphylococcus aureus* Information for Equine Veterinarians



My Equine Patient has been diagnosed with MRSA, now what?

What is methicillin-resistant *Staphylococcus aureus*?

- *Staphylococcus aureus* frequently colonizes the skin and noses of people, horses and cattle.
- MRSA is defined by resistance to <u>oxacillin</u> and is resistant to all beta-lactams.
- Isolating MRSA in a horse has public health implications because MRSA infections are challenging to treat in animals and people.

Where did my patient get MRSA?

- MRSA can be spread from a person or horse that is sick (infected) or from a healthy MRSA carrier (colonized).
- Your patient might have already been colonized with MRSA then incurred a wound that became infected.
- MRSA is typically spread through direct contact (skin, nose, mouth, wounds) but can be spread via contaminated hands, surfaces, or equipment in the clinic or barn.

Is there risk to my staff and other patients?

- With proper personal protective equipment and hand hygiene, the risk of MRSA spread is low.
- Immunosuppressed staff should avoid contact with MRSA-infected horses when possible.
- Everyone can reduce spread by washing hands.
- Anyone concerned about MRSA exposure or illness should contact their healthcare provider.



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How can I treat my equine patient?

- Do **NOT** screen healthy horses for MRSA. Do **NOT** treat colonized horses with no clinical signs; you cannot decolonize a horse.
- Treating infected horses can include antibiotics and fixing underlying conditions (e.g., removing implants).
- Topical mupirocin is often effective.
- Consult with a pharmacologist, microbiologist, or infectious disease specialist as needed for treatment guidance.

General precautions

- Isolate hospitalized MRSA patients and minimize number of staff caring for them.
- Wear gloves, coveralls/gowns, face shields/masks when handling MRSA horses, and wash hands after all contact. Change clothes if contaminated.
- Conduct procedures on disinfectable floors.
- Use caution not to cross-contaminate your hospital equipment and surfaces.
- Follow manufacturer guidelines for cleaning products (e.g., dilution, storage, contact time).
- If multiple patients are diagnosed with MRSA, consult with your health department about screening your veterinary personnel.

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>http://www.ksvdl.org/</u>
- CDC Information about MRSA
 <u>http://www.cdc.gov/mrsa/index.html</u>
- CDC MRSA Cleaning and Disinfection
 <u>https://www.cdc.gov/mrsa/community/environment/index.html</u>



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