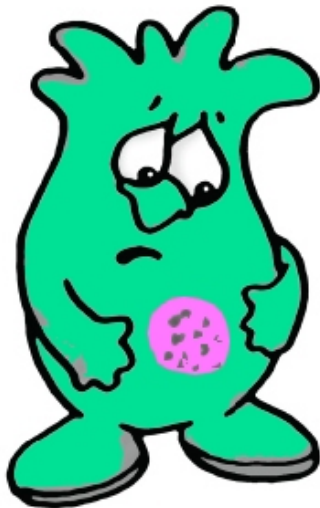
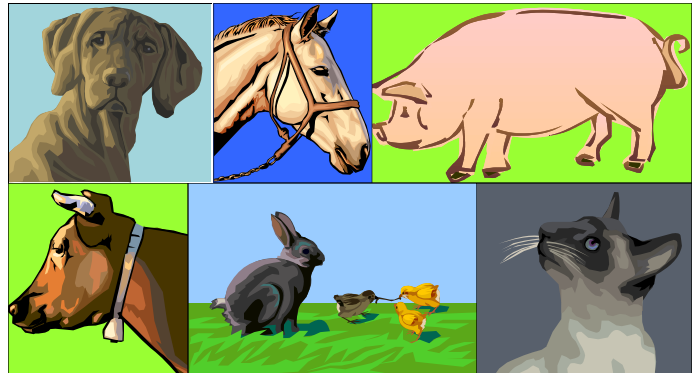


MRSA and Animals



&



Methicillin Resistant *Staphylococcus Aureus* (MRSA) An Emerging and Zoonotic Pathogen

Colonization with MRSA has been documented in dogs, cats, rabbits, birds, horses, cattle, and pigs.

The role of pets in transmission of MRSA is still unclear, but evidence suggests that MRSA can be transmitted between persons and their pets, in both directions.

People working in veterinary hospitals could have an increased risk of carrying MRSA because of contact with infected animals and antimicrobial drugs in their work environment. Ongoing MRSA surveillance in animals is necessary, including proper testing of specimens from clinically affected animals.

Suspect MRSA infection in:

Dogs when any of the following conditions are *not* responding to routine empirical antimicrobial therapy and diagnostic testing indicates infection with *Staphylococcus aureus*:

- Pyoderma
- Otitis externa
- Recurring urinary tract infections
- Post-surgical wound infections
- Persistent surgical implant or catheter-site infections

Horses when any of the following conditions are *not* responding to routine empirical antimicrobial therapy and diagnostic testing indicates infection with *Staphylococcus aureus*:

- Post-surgical wound infection
- Persistent drainage or surgical implant infections

If MRSA infection is suspected it is essential to perform a bacterial culture and sensitivity. MRSA is resistant to all beta-lactam antimicrobials on *in vitro* sensitivity testing. Some strains of MRSA show resistance to all antimicrobials on routine sensitivity testing; in these special cases, it is necessary to request extended antimicrobial panels.

MRSA, Pets & People

Methicillin-resistant *Staphylococcus aureus*

(MRSA) is a type of bacteria that is resistant to certain antibiotics. Although MRSA is primarily found in people, animals can also be infected.



How is MRSA transmitted to people and animals?

Direct skin-to-skin contact is the most common way MRSA is transmitted, but it can also be

transmitted by contaminated objects such as bandages.

What are the symptoms of MRSA in animals?

MRSA most commonly causes skin infections or wound infections.

What are the symptoms of MRSA in people?

MRSA commonly causes skin infections, such as abscesses or boils.

Can a pet or person have MRSA and not be sick?

Yes. People and pets can carry MRSA on their skin or in their nose and not have outward signs of illness. This is called colonization.

How is MRSA diagnosed?

A swab taken from the affected area is submitted to a laboratory for bacterial culture.

How is MRSA treated?

Treatment varies from case to case. If the person or pet is colonized, no treatment may be needed. Skin infections may be treated with topical cleaning agents and antibiotic ointments. More serious infections are treated with oral antibiotics. The choice of antibiotics should depend on culture-based antimicrobial sensitivity tests.

Sources:

Minnesota Department of Health www.health.state.mn.us

Centers for Disease Control www.cdc.gov

Ohio State University College of Veterinary Medicine www.odh.ohio.gov/ASSETS/4FF0B27FC779400284CB5EB6FFE09156/OSUMRSAVets.pdf

If my pet has a MRSA infection, what can I do to avoid getting infected?

1. Follow all wound care instructions from your veterinarian.
2. Practice good hand hygiene. You, your family, and others in close contact with the affected pet should wash hands frequently with soap and warm water or use an alcohol-based hand sanitizer, especially after changing the animal's bandage and bedding or touching an infected wound.
3. If possible, wear disposable gloves when touching items such as the animal's bedding, bandages or any other objects that may have been in contact with the infected wound.
4. Clean washable items that become soiled with hot water and laundry detergent (use bleach if possible). Drying laundry in a hot dryer, rather than air-drying, also helps kill bacteria.
5. Use a household disinfectant or bleach solution to clean any surfaces contaminated by wounds or drainage.
 - To make bleach solution mix 2 teaspoons bleach into one quart of water.
 - Be sure to make a new bleach solution every day.
 - Never mix bleach with other cleaners, especially ammonia.
6. If anyone in your home has recently had surgery or is immunocompromised, he/she should avoid contact with the infected pet, the pet's wound and any contaminated items such as pet bedding and bandage materials.

