What can I do if my animal is MRSA positive?

Talk to your veterinarian, who can help you to determine the best approach to follow with your animal based on the health risk for yourself, your family, and the animal. **You do not need to get rid of your animal.** Remember that healthy people or animals will rarely develop disease under normal circumstances. In addition, MRSA is highly adapted to humans, but not to other animal species; therefore, if your animal is MRSA positive, it is possible that the original source of infection for the animal could be you or somebody in your household. Talk with your health care provider if you have any questions or concerns about yourself or your family.

What can I do to protect myself and my family?

In every case, you should follow the instructions of your veterinarian, as well as the basic precautions indicated below to minimize or avoid the transmission of these bacteria:

- Wash your hands with warm running water and soap for at least 15 seconds after playing or handling your animals, as well as after cleaning their cages, water bowls, toys, or other equipment.
- Keep cuts and scrapes clean and cover them with bandages, especially when handling your animals.
- Do not share food with your pet and avoid sharing personal items, such as towels.
- Do not allow licking of your face or wounds.
- Avoid direct contact with cuts and scrapes on your animal and use gloves to clean and treat them.
- Do not sleep with your dog if you are an immunocompromised or a high-risk person.
- Take extra personal hygiene precautions when handling ill animals.

What is the Veterinary Teaching Hospital doing about MRSA?

The Ohio State University Veterinary Teaching Hospital (VTH) has established specific protocols to handle and manage MRSA positive animals and their environments. In addition, the VTH has established a surveillance program, in which routine samplings of the hospital environments and patients are performed. The main objective is to prevent and control the transmission of MRSA in order to protect our patients and clients as well as the students and personnel at the VTH.

Brochure content reviewed and approved by the College Infectious Disease Committee

About the College of Veterinary Medicine

The Ohio State University College of Veterinary Medicine is ranked fifth in the nation among veterinary schools, according to the *2008 U.S. News & World Report's* "Best Graduate Schools." The college includes more than 1,000 faculty, staff, and students in the Departments of Veterinary Biosciences, Veterinary Clinical Sciences, and Veterinary Preventive Medicine. The Veterinary Teaching Hospital is a comprehensive referral center and is among the largest in the world, with more than 35,000 large and small animal patients each year. In addition, the college operates a nationally recognized large-animal ambulatory practice and teaching unit in Marysville, Ohio, and a Food Animal Health Research Program in Wooster at the Ohio Agricultural Research and Development Center. More information about the College of Veterinary Medicine can be found at **vet.osu.edu**.

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The Ohio State University
Veterinary Public Health Program

Facts for pet owners about

Staphylococcus aureus and MRSA

College of Veterinary Medicine
Veterinary Teaching Hospital

MRSA, or Methicillin-Resistant *Staphylococcus aureus*, is a newly emerging bacterial pathogen that is resistant to commonly used antibiotics.

The CDC estimates that 25 to 30 percent of people serve as carriers for *Staphylococcus aureus.*

What is *Staphylococcus aureus*?

Staphylococcus aureus is a bacterium that is a normal, microscopic germ inhabitant of the skin and nasal passages of humans and some animals. The Centers for Disease Control (CDC) estimate that 25 to 30 percent of humans are carriers for *Staphylococcus aureus*.

What illness is caused by *Staphylococcus aureus*?

Under normal conditions, the bacteria does not cause significant illness or health problems to humans or animals. However, in specific conditions, when there is damage to the skin surface (cuts, scrapes, bites, surgical incisions) or the ability to fight infectious disease of your body is compromised or entirely absent (immunosuppression or immunocompromise), *Staphylococcus aureus* can cause wound infections and disease. In these cases, antibiotics are necessary to treat infection.

How do I get *Staphylococcus aureus*?

Staphylococcus aureus can be found everywhere around us. Exposure to the bacteria can occur in several ways. These include:

- Contact with an infected individual
- Contact with a contaminated environment
- Recent hospitalization or invasive medical procedure (i.e. surgery, severe illness, catheterization)
- Contact with pets or other animals carrying the bacteria

It is important to remember that contact with the bacteria does not mean that you will become infected. The majority of individuals who are exposed to *Staphylococcus aureus* do not develop the disease. An underlying illness which weakens the immune system or damage to the skin surface is necessary for the bacteria to cause disease.

How does my animal get *Staphylococcus aureus*?

Your dogs, cats, and horses can get *Staphylococcus aureus* in the same way that you do: through contact with infected individuals or animals, contaminated environments, or recent invasive medical procedures.

Should I be concerned?

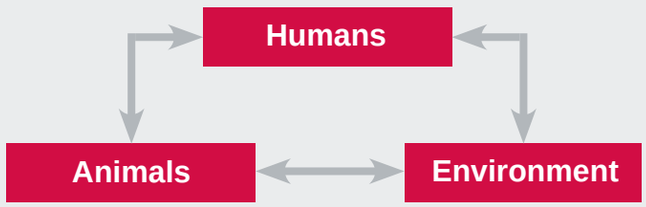
There is a newly emerging strain of *Staphylococcus aureus* that is resistant to many antibiotics (e.g. penicillin, amoxicillin) that are commonly used to treat the skin infections and illnesses associated with it, increasing the possibility of treatment failure.

What is MRSA?

MRSA, or *Methicillin-Resistant Staphylococcus aureus*, is the name of this newly emerging bacterial pathogen. The CDC estimates that approximately one percent of humans may carry MRSA. There are other *Staphylococcus* species which are resistant to methicillin; however, the chance of human infection with these species is very low.

Is MRSA dangerous for me or my animal?

Under normal conditions when a person or animal is healthy, MRSA causes no significant illness. However, if a person or animal is immunocompromised (cancer, recent surgery, steroid therapy), has skin damage, or has undergone an invasive medical procedure, MRSA can cause severe or life-threatening illness.

Where does MRSA come from?

MRSA is a zoonotic pathogen. This means that it is possible for you to transfer the bacteria to your animal, and for your animal to transfer the bacteria to you. MRSA is also common in some environments, and you or your animal can acquire the infection.