What is methicillin resistant *Staphylococcus aureus* and what causes it?

Methicillin resistant *Staphylococcus aureus* (staff-EH-low-cok-cus are-EE-us), or MRSA, is a strain of bacteria that has become resistant to certain antibiotics. It is an important pathogen in human medicine and has more recently become a concern in veterinary medicine, as has the potential for spread of the bacteria between animals and humans. *Staphylococcus* infections, including MRSA, occur most frequently among persons in hospitals and health care facilities (such as nursing homes and dialysis centers) who have weakened immune systems.

What animals get MRSA?

MRSA infections have been reported in dogs, horses, cats, cattle, sheep, rabbits, chickens and a parrot.

How can my animal get MRSA?

Spread of MRSA between animals is primarily by direct contact or by fomites, objects in the animals environment that have been contaminated by an infected animal (e.g., buckets, brushes, halters). Aerosol transmission may be possible.

How does MRSA affect my animal?

Most animals with MRSA show no signs of illness. When illness or disease occurs, skin or wound infections are most commonly seen. Pneumonia or respiratory infections, arthritis or joint infections occur, but are less frequent.

Can I get MRSA?

Yes. People most commonly get MRSA infections from other infected people. This occurs by either direct contact (e.g., hands) or by fomites. Transmission between people and animals is uncommon. When it occurs it usually involves close direct contact with an infected animal.

Disease caused by MRSA primarily involve skin infections but can also cause pneumonia or systemic disease. Rarely, intestinal illness may occur. Skin lesions may look like a pimple or boil and can be red, swollen, painful or have pus or other drainage.

Who should I contact, if I suspect MRSA?

**In Animals** –
Contact your veterinarian.

**In Humans** –
Contact your physician.

How can I protect my animal from MRSA?

Good hygiene, including hand washing and surface disinfection is important in preventing the spread of the bacteria. This is especially important after handling animals with skin lesions.

How can I protect myself from MRSA?

Practice good hygiene. Wash your hands thoroughly with soap and water or use an alcohol-based hand sanitizer. Keep cuts and scrapes clean and covered with a bandage until healed. Avoid contact with other people’s wounds or bandages.

For More Information

- CFSPH Technical Fact Sheets. Methicillin Resistant *Staphylococcus aureus* at http://www.cfsph.iastate.edu/DiseaseInfo/
- Exposure to methicillin resistant *Staphylococcus aureus* can cause severe skin lesions.

Photos from: www.cchealth.org/topics/mrsa and www.uthscsa.edu