

# Methicillin-Resistant *Staphylococcus aureus*

## MRSA

### 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, due to the potential for spread between animals and humans. *Staph* infections, including MRSA, occur most frequently in persons who have weakened immune systems.

### What animals get MRSA?

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

### How can my animal get MRSA?

The spread of MRSA between animals is primarily by **direct contact** (e.g., wounds or lesions) or by **fomites**, objects in the animals environment that have been contaminated by an infected animal (e.g., buckets, brushes, halters). **Aerosol** transmission may also 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 infection, arthritis or joint infections may also, 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, contact with lesions) or by **fomites** (e.g contaminated objects such as towels). 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. Skin lesions may look like a pimple or boil and can be red, swollen, painful or have pus or other drainage. MRSA can also cause pneumonia or systemic disease. Rarely, intestinal illness may occur.

### 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 environmental disinfection is important in preventing the spread of the bacteria. This is especially important after handling animals, especially those with skin lesions.

### How can I protect myself from MRSA?

Practice good hygiene. Wash your hands frequently and 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/factsheets.htm>

CDC website. MRSA in healthcare settings at [http://www.cdc.gov/ncidod/dhqp/ar\\_mrsa\\_spotlight\\_2006.html](http://www.cdc.gov/ncidod/dhqp/ar_mrsa_spotlight_2006.html)

CDC website. Community-associated MRSA information for the public at [http://www.cdc.gov/ncidod/dhqp/ar\\_mrsa\\_ca\\_public.html#](http://www.cdc.gov/ncidod/dhqp/ar_mrsa_ca_public.html#)

U.S. Department of Agriculture, Animal and Plant Inspection Service, Veterinary Services (USDA-APHIS-VS). Methicillin-resistant *Staphylococcus aureus*: A growing concern for animal and human health.

