

SCHOOL OF VETERINARY MEDICINE

PURDUE UNIVERSITY

Methicillin-Resistant *Staphylococcus aureus* (MRSA) Policy for Teaching Animals

According to the American Animal Hospital Association (AAHA), “MRSA should be considered an important emerging nosocomial and zoonotic disease.” Methicillin-resistant *Staphylococcus aureus* are gram positive bacteria that have developed resistance to the antibiotic methicillin and other beta-lactam antibiotics including penicillins, cephalosporins, and carbapenems.¹ Other *Staphylococcus* species develop methicillin resistance, including *Staphylococcus intermedius* (MRSI), *Staphylococcus pseudintermedius* (MRSP), and *Staphylococcus epidermidis* (MRSE). For the purpose of this policy, the term “MRS” will be used for all methicillin-resistant *Staphylococcus* species. Treatment in animals is usually but not universally successful. Most animals clear the infection within 6-8 weeks. Proper hand hygiene is of the utmost importance in decreasing the spread of MRS to both people and other animals. All students, staff, and faculty entering the animal rooms are required to wash their hands upon entering, after handling each animal, and upon leaving the animal rooms.

The following policy was created to apply to all teaching animals that are owned and housed by the Purdue University School of Veterinary Medicine (SVM). Principle investigators / course budgets will be responsible for all fees incurred during the testing, quarantine, and treatment of MRS suspect animals.

- No animal with suppurative lesions, cellulitis or other lesions considered suspicious for MRS infection upon arrival will be accepted by Veterinary Laboratory Animal Care (VLAC).
 - Animals donated through the SVM Large Animal Hospital with suppurative lesions must be cultured and diagnosed as MRS negative prior to discharge from the Large Animal Hospital into the housing facilities.
- If any Purdue SVM owned teaching animal develops suppurative lesions, cellulitis, or other lesions suspicious for MRS infection while housed at the SVM housing facilities, the following will be performed:
 1. A sterile sample will be taken from the lesions and submitted to the Animal Disease Diagnostic Laboratory (ADDL) for culture and susceptibility testing. This will include screening cultures for MRS, and routine aerobic culture.
 2. A Clinical Activity Report (CAR) will be submitted to the Laboratory Animal Program (LAP) office.
 3. The animal will be placed in isolation until the culture results are received. If the culture is negative for MRS, the animal will be returned to regular housing. Only approved VLAC and LAP personnel will be allowed to enter the isolation room. Gloves and dedicated scrubs or lab coat will be worn when handling the affected animal.
- If a horse, pig, or other farm animal’s culture results are positive for MRS, the animal will be humanely euthanized using a method approved by the “AVMA Guidelines on Euthanasia” dated June 2007².
- If a dog or cat’s culture results are positive for MRS, the animal will be humanely euthanized using a method approved by the “AVMA Guidelines on Euthanasia” dated June 2007² or will remain in isolation for at least 8 weeks and receive appropriate treatment. Animals placed in isolation will be released only if all of the following conditions are met:
 1. Lesions have healed and/or cellulitis has resolved
 2. Three successive negative cultures of lesions tested at least three days apart.
 3. Three successive negative nasal and rectal cultures taken at least three days apart.
- If a dog or cat’s culture results remain positive for MRS after 8 weeks of isolation and treatment, the animal will be humanely euthanized using a method approved by the “AVMA Guidelines on Euthanasia” dated June 2007².

1. American Animal Hospital Association (AAHA) “Frequently Asked Questions about Methicillin-Resistant *Staphylococcus aureus* (MRSA)”
2. American Veterinary Medical Association. “AVMA Guidelines on Euthanasia”. http://www.avma.org/issues/animal_welfare/euthanasia.pdf