

# Guidelines for VTH animal patients with active confirmed or suspected MRS infection

## 1. When should MRS infection be suspected?

- A. Animals with purulent lesions (dermatitis / pyoderma, otitis, surgical wound, others).
- B. When an antibiotic susceptibility report shows a *Staphylococcus* isolate resistant to oxacillin (a marker for methicillin resistance).

**Note:** The ADDL microbiology laboratory routinely performs a panel of tests on all oxacillin-resistant *Staphylococcus* isolates from the VTH to determine true MRS status. These results will lag behind the preliminary culture report by several days. **If a report of an oxacillin-resistant *Staphylococcus* infection is received, or if an animal has clinical signs consistent with MRS infection, the clinician should contact a member of the Infectious Diseases Committee to discuss the case. Appropriate barrier precautions and / or isolation procedures will be determined for each patient.** General guidelines are listed below.

## 2. Presentation of animals with active confirmed or suspected MRS infections

Animals with active confirmed or suspected MRS infections should not be brought into the public reception area or have contact with people other than their owners and VTH staff as needed.

- Inform clients of this policy prior to visit; educate clients regarding the risks of transmission to other animals and potentially to people.
- Animals with confirmed or suspected MRS infections should not have contact with other animals.
- Arrange for animal to be taken directly to an exam room that does not open into the reception area or the bullpen.
- Receptionist meets client in the exam room.
- Student / clinician goes directly to exam room for the office call.
- If the animal is admitted, a plan should be made prior to admission regarding where animal will be housed in the clinic.
- If the animal will be treated as an outpatient, the animal may remain with the owner if possible, or may be housed in a cage (see guidelines below) while awaiting a procedure.
  - Allow the animal and it's owner to stay in the examination room while they wait or,
  - House the animal in a cage in a ward with appropriate signage (suspected or confirmed MRS infection, only clinician and student to handle).
  - Use appropriate barrier precautions when handling the animal for diagnostic procedures.
  - Clean and disinfect the exam room and / or cage in which the animal was housed when the animal leaves the clinic. If it is not possible to clean and disinfect an area immediately, please place a sign (available at receptionist desk, ICU, medicine ward, surgery ward) on the door or cage indicating that the room or cage should not be used until cleaned and disinfected.
  - Once an area is cleaned and disinfected, no "down time" is required before use by another patient.

## 3. Hospitalized animals with active confirmed or suspected MRS infections

- Limit the people that handle the animal to the attending clinician and student when possible.
- Restrict caregivers to those that are healthy and not at increased risk for opportunistic infections.
- Observe standard veterinary precautions (<http://www.nasphv.org/Documents/VeterinaryPrecautions.pdf>; printed versions available in the ICU, isolation, at the reception desk, in each ward, and in the VTH Director's office), and carefully follow cleaning and disinfection protocols. Briefly,
  - Use proper hand washing frequency and technique
  - Do not touch your face – if you do, wash your hands
  - Wear gloves and observe proper glove protocol.

- While wearing gloves, do not write on the patient's record, treatment sheet or on anything else. Do not touch/use pagers, cell phones, PDAs, etc. until gloves are removed and hands washed.
- Use barrier nursing techniques where the animal is housed.
  - Do not house affected animals between animals that do not have MRS infections. Consider housing MRS suspect animals in isolation if barrier nursing is not practical in other wards.
  - Use appropriate personal protective equipment (PPE): mask, gloves, gown, and if necessary, hair protection and booties, when handling the animal. Gloves are always required. For most procedures or animal restraint, a barrier gown is required. A mask is recommended to discourage touching one's face while handling the patient. Other PPE are used as indicated on a case-by-case basis. Avoid contamination of long hair, dangling jewelry, etc. When leaving the area, remove your PPE and discard into the labeled container.
  - Place disposable materials in labeled biohazard bags using care not to contaminate the outside of the bags. When bags are half full, close the bag, and with assistance, place the bag inside of a second bag, without contaminating the outer bag. Label the bag (MRS), spray the outside of the outer bag with disinfectant, and place it outside of the barrier area. Notify facilities staff that the bag is ready for disposal. \*Place sharps from the animal in standard sharps containers\*.
  - Place laundry from the animal in labeled bags. When bags are 50% full, close, and with assistance, place the bag inside a second bag without contaminating the outer bag. Label the outer bag (MRS), spray the outside of the outer bag with disinfectant, and after at least 10 minutes of disinfectant contact time, take it to the laundry, or place it in the nearest dirty laundry cart.
  - Wash your hands after removing your gloves, then don clean gloves and disinfect any surfaces (doorknobs, doorframes, etc.) that may have been contaminated as you departed the barrier area. Note that MRS are considered susceptible to the disinfectants and disinfection protocols used in the VTH.
  - To disinfect, clean the area well, removing any organic debris, then wipe with disinfectant (e.g. Roccal-D or disinfectant wipes), leaving the disinfectant on the surface for at least 10 minutes or until it dries. Wash hands again after completing disinfection.
  - Properly clean and disinfect items such as stethoscopes after handling animals infected with MRS.
  - Animals with MRS should have their own rectal thermometers. DO NOT use rectal thermometers used for these animals for any other animals. When the infected animal goes home, please discard the thermometer in a labeled biohazard bag using care not to contaminate the outside of the bag.
- Keep the animal housed in one cage – do not move it from cage to cage.
- Use common sense when moving the animal about the hospital. For example, not allow contact with other animals, or allow people to pet the animal. Immediately pick up and properly discard any feces from the animal.
- If the animal must be handled in diagnostic imaging, endoscopy, or another area, use appropriate barrier precautions. Clean and disinfect all areas using standard protocols. Such procedures should occur at the end of the day when possible.
- Clinicians and students caring for patients in the barrier nursing areas are responsible for keeping the area clean and neat. Clean the cages daily and properly dispose of all materials used after each use. Cages will be cleaned and disinfected by facilities staff when the animal is discharged. Once an area is disinfected, no "down time" is required before use by another patient.

**Note:** once an animal has been treated for MRS infection and the infection appears to be cleared, it may be advisable to determine if the animal is colonized with MRS. This may be accomplished by collecting nasal and rectal swabs and submitting them to the ADDL for **screening** culture. To submit nasal swabs for screening culture, use a sterile culture swab to swab 0.5 cm into each nostril; (for cats and very small dogs, the swab may be rubbed along the outside of the external nares), and submit to the microbiology service at the ADDL using the standard submission form. For rectal swabs, insert swab 0.5 – 1.0 cm into rectum. Note on the form that the swab is being submitted to **screen** for methicillin resistant *Staphylococcus*. Be sure to fill out the submission form completely. Please contact a member of the Infectious Diseases Committee with questions.