

STANDARD OPERATING PROCEDURE
RECEIPT, QUARANTINE, ACCLIMATION, AND
PREVENTIVE HEALTH MEDICINE STANDARDS FOR SHEEP

1.0 PURPOSE:

- 1.1 This SOP specifies the responsibilities of the Animal Resources (AR) and Oconee County Farm personnel relating to the receiving, quarantine, acclimation procedures for sheep used for research or instruction at the College of Veterinary Medicine. It also specifies the standards for preventive medical care for this species.
- 1.2 The individual assigned to perform the duties and tasks listed in this SOP is responsible for its implementation.

2.0 STANDARDS:

- 2.1 All animals should be housed and husbanded in accordance with the environmental, primary enclosure and enrichment standards outlined in the applicable husbandry SOP for sheep.
- 2.2 Animals will be obtained only from vendor/sources approved by AR.
- 2.3 All animals must undergo a seven (7) day quarantine and acclimation period.
- 2.4 Animals who do not meet the health status requirements, order specifications or do not have appropriate documentation may be subject to rejection by AR.

3.0 SPECIAL CONSIDERATIONS:

3.1 Animal Health: The general health condition of each animal should be evaluated by the individual assigned this task as they are received from the vendor/source. This individual is responsible for performing the physical health examination and carefully observing each animal for signs of illness upon receipt, including animals picked-up from the vendor and transported by AR personnel. Take sufficient time to observe the sheep for any of the following that might indicate an animal health problem. An annual physical exam is an expectation, and must be documented in the animal's medical record.

- 3.1.1 Look for sheep exhibiting a hunched posture and/or shivering.
- 3.1.2 Look for lesions or scabbed areas any where on the body, especially around the mouth, lips, gums, nostrils, ears, udder, and scrotum.
- 3.1.3 Check for abscesses and/or contusions on the skin.
- 3.1.4 Look for matted patches of hair and/or a rough hair coat.
- 3.1.5 Check for ocular discharge and any signs of inflammation around the eyes. Eyes should be fully open and clear. Check for nasal discharge.
- 3.1.6 Check for lameness and/or stiffness in legs and feet. Look for foot rot; sheep should exhibit normal posture, movement, and gait. Look for any animal unwilling to stand or reluctant to move.
- 3.1.7 Look for any animal that is kicking at its belly or lying down and getting up at frequent intervals. Look for any signs of bloating in the abdomen.
- 3.1.8 Look for any signs of diarrhea and/or blood.
- 3.1.9 Look for any animals that appear to be dehydrated, depressed, weak, or has a general unthrifty appearance.
- 3.1.10 Check for animal that are excessively bleating or moaning.

- 3.1.11 The use of electric prods, “hot sticks,” or “hot shots” in the movement, manipulation and/or transport of sheep is strictly prohibited.
- 3.1.12 Sheep suspected of or found with any animal health problems should be reported to the Animal Health Technician (AHT), the attending veterinarian and/or the Lab Animal Facilities Supervisor (LAFS) before accepting the sheep from the vendor/source. In situations where AR personnel are picking up animals from the vendor a determination will be made as to whether to take receipt of the animal(s) or reject them.

3.2 Health and Safety:

- 3.2.1 Follow all Personal Protection Equipment (PPE) requirements.
- 3.2.2 Follow all SOPs when using equipment and chemicals.
- 3.2.3 Material Safety Data Sheets (MSDS) and First Aid Kits are located in all Animal Facility Offices.
- 3.2.4 Be familiar with the locations of fire extinguishers, emergency showers and eye wash stations.
- 3.2.5 **NOTE:** Personnel should exercise care, caution, and good judgment while working with sheep in confined areas such as stalls, the corridor of Building 11 and/loading and unloading sheep. BE CAREFUL.
- 3.2.6 Personnel should wash their hands and lower arms after manipulating sheep and/or working with chemicals.

3.3 Personal Protection Equipment:

- 3.2.1 Follow all Personal Protection Equipment (PPE) requirements, including the use of disposable gloves. Personnel may be required to wear scrubs, coveralls, dedicated rubber or disposable boots, and disposable gloves when working with sheep.
- 3.2.2 Follow all SOPs when using equipment and chemicals.
- 3.2.3 Material Data Safety Sheets (MSDS) and First Aid Kits are located in all Animal Facility Offices.
- 3.2.4 Be familiar with the locations of fire extinguishers, emergency showers and eye wash stations.
- 3.2.5 **NOTE:** Personnel should exercise care, caution, and good judgment while working with sheep in confined areas such as stalls, the corridor of Building 11 and/loading and unloading sheep. BE CAREFUL.
- 3.2.6 Personnel should wash their hands and lower arms after manipulating sheep and/or working with chemicals.
- 3.2.7 Hooves should be checked regularly and trimmed as appropriate.

4.0 MATERIALS:

4.1 Equipment:

- 4.1.1 Mobile animal transport cages or crates (as needed)
- 4.1.2 Identification ear tags (as applicable)
- 4.1.3 Misc. sheep handling equipment (as needed)

4.2 Preventive Medicine Treatment

4.2.1 Vaccines: Sheep must be vaccinated with Clostridium perfringens type C, D & T bacterin-toxoid

4.2.2 Antibiotics:

Sheep should be treated prophylactically with Oxytetracycline 200mg/ml at 9mg/lb IM or SC upon receipt to reduce the risk of transmission of ocular Chlamydial infections. This is an Extra-Label Usage and requires the prescription of the supervising veterinarian.

4.2.3 Anthelmintics: Sheep will be treated with an appropriate FDA-approved anthelmintic as determined by the attending veterinarian.

4.2.4 Withdrawal times: Withdrawal times for medications must be validated if animals are to be sold for meat, milk, or slaughter purposes.

5.0 PROCEDURES:

5.1 Animal Receiving:

5.1.1 Upon receipt AR personnel should check all animal(s) to ensure they meet the animal order specifications for weight, age, gender, etc. If any animal(s) are found not meeting these specifications the Principle Investigator (PI), Assistant Director of Animal Resources (ADAR) and/or Animal Resources Manager must be notified before receipt of these animals can be approved.

5.1.2 Personnel should exercise caution, care, and use good judgment while working with sheep and transporting sheep from vendor/source to pastures and/or stalls.

5.1.3 Proper and appropriate techniques must be employed while manipulating and transporting sheep. Exercise patience and care when moving sheep in order to minimize stress and reduce risk of injury to the animal and yourself.

5.1.4 AR personnel must perform a physical health examination on each animal (refer to section 3.1, Animal Health) prior to official receipt from the vendor/source.

5.1.5 Any animals failing the physical health examination will be rejected. In questionable cases, personnel should seek a second opinion from or consult with the veterinary staff.

5.1.6 Upon arrival the Principal Investigator (PI) or his staff should be notified by the LAFS or their designee and given the opportunity to examine the animals. The physical health examination will be performed by AR staff.

5.1.7 Animals used for research projects lacking appropriate health and transit documentation (e.g., USDA APHIS forms, interstate shipment certificates, etc.) will be rejected.

5.2 Quarantine and Acclimation Procedures:

5.2.1 All sheep will be held for a seven (7) day quarantine and acclimation period at the Riverbend Farm Facilities or Building 11. Exceptions are sheep used in non-survival anatomy labs in which animals are euthanized the day of receipt or other projects which have the prior approval from the ADAR.

5.2.2 During the seven (7) day acclimation period, AR staff or the user will have the right of refusal of any animal not suitable for research or teaching.

- 5.2.2.1 Sheep will be sold (if possible) or euthanized if not suitable.
- 5.2.2.2 Any financial loss because of sale or euthanasia will be borne by the user.

- 5.2.3 The health status of these sheep should be closely monitored during the seven (7) day quarantine period. Animals may not be used during the quarantine and acclimation period.
- 5.2.4 A health history will be requested from the vendor/source.
- 5.2.5 Additional sheep vaccinations and treatment for parasites during quarantine will be determined after assessment of the health status and history of the sheep.
- 5.2.6 Newly arriving animals should be segregated from other sheep until their health status is verified.
- 5.2.7 Hooves should be checked regularly and trimmed as appropriate.

6.0 RECORDS:

- 6.1 Health and vaccination papers (as applicable)
- 6.2 Invoice or Bill of Sale (as applicable)
- 6.3 Interstate transport documents (as applicable)

7.0 DEFINITIONS AND REFERENCES:

7.1 Definition:

- 7.1.1 Acclimation (Conditioning): time given to a newly arrived animal to become accustomed to its new surroundings before the research for which it is intended begins.
- 7.1.2 Anthelmintic: a type of drug that eliminates a wide variety of worms.
- 7.1.3 Antibiotic: a type of drug that kills or prevents the reproduction of pathogenic microorganisms on or in animals.
- 7.1.4 Enrichment: a method of providing animals with the opportunity to behave as they do in the wild, playing, foraging, grooming, and interacting in other ways with one another.
- 7.1.5 Mastitis: an infection of the mammary glands characterized by unusual firmness, heat, and discoloration.
- 7.1.6 Material Safety Data Sheets (MSDS): summary of information (manufacturer information and product ingredients; physical/chemical properties, reactivity, toxicological, ecological information on the product; and personnel health hazards information.
- 7.1.7 Personal Protective Equipment: articles of clothing and equipment that protect workers against direct contact with infectious, toxic, or corrosive agents and against temperature extremes or other physical hazards
- 7.1.8 Primary enclosure: a cage, run or pen which is used as the principal housing containment area for animals.
- 7.1.9 Principal Investigator (PI): the scientist who plans and coordinates all phases of the research work and the research protocol.
- 7.1.10 Subclinical: an infection not detectable by usual means in one species but can be lethal to other species when transmitted to them.
- 7.1.11 Quarantine: isolation of an animal to prevent it from spreading or contracting disease and to allow it time to acclimate to new surroundings.
- 7.1.12 Vaccine: preparation of attenuated (weakened) or killed disease-producing viruses or microorganisms (or of substances extracted from them) administered by mouth or by injection to induce active immunity to the specific disease.

7.2 References:

- SOP 01.033, "Husbandry of Sheep (stalled)"*
- SOP 04.002, "Documentation of Animal Room Logs"*
- National Research Council, *Guide for the Care and Use of Laboratory Animals*
(<http://www.nap.edu/readingroom/books/labrats/>)
- Federation of Animal Science Societies, *Guide for the Care and Use of Agricultural Animals in Research and Teaching*