

Occupational Health & Safety

Teaching/Research Programs Using Sheep

INTRODUCTION

The Public Health Service notes that "virtually every medical achievement of the last century has depended directly or indirectly on research with animals". The responsible use of animals in research and teaching remains an important way to solve medical problems. As a participant in this study, you will be the beneficiary of laboratory animals' vital role in biomedical research and training.

The University of Mississippi Medical Center is certified and regulated by the United States Department of Agriculture as a registered research facility. Likewise, the institution has an Assurance Statement on file with the Office of Laboratory Animal Welfare through the National Institutes of Health. A prominent form of accreditation is found with the Association for Assessment and Accreditation of Laboratory Animal Care International, signifying the ultimate level of responsible animal care and use.

All research and teaching studies using animals are reviewed and approved by an Institutional Animal Care and Use Committee. This committee is composed of scientists, physicians, veterinarians, business professionals, and community members. Each approval confirms the scientific and medical necessity of the animal study and assures appropriate animal care and use.

POTENTIAL HAZARDS

Zoonoses: Working with animals presents some inherent risks. Physical injury from bites and scratches are uncommon with appropriate handling techniques. As well, zoonotic diseases [a disease of animals capable of afflicting humans] may be found in sheep and have the possibility of affecting personnel.

Each sheep is evaluated by a member of the veterinary staff for indications of infectious or zoonotic diseases. Individual animal health is continually evaluated throughout the animal's stay. All animals in this laboratory session have been found to be healthy and show no indication of clinical diseases. Particularly relevant is the rickettsial agent, *Coxiella burnetii*, the causative agent for Q fever. Q fever is easily spread via aerosols, therefore, respiratory protection is mandatory. All sheep have tested negative for this agent, yet UMMC policy dictates that personnel wear N95 respiratory masks when exposed to the animals. Another zoonotic disease is quite prevalent in animal environments, that being allergic reactions to laboratory animal dander and proteins. Personnel should take precautions to avoid exposures and limit the allergic potential by wearing gloves and facemasks. Other zoonotic diseases could be found in these animals.

Other Hazards: The animal research environment contains many hazardous risks that must be recognized. Physical hazards include potential injuries from heat/steam exposure, slips and falls due to wet floor surfaces, and ionizing radiation. Chemical hazards may include contact or exposure to disinfectants and environmental cleansers as well as intentional animal exposures. Finally, biologic hazards may be found in studies involving microbial and infectious disease research.

PROTECTION

Primary means of protecting yourself from an injury or illness are found in being knowledgeable and aware of potential risks. Personnel must have annual respiratory fit testing and wear an approved N95 mask. Persons working with live animals should wear gloves and minimize skin-to-skin exposures. Hypersensitive individuals should take special considerations after consulting their medical providers. Additionally, persons may have some unique health issue leading to an increased susceptibility to zoonotic diseases, likewise prompting their consultation with a health care provider. Should an injury or problem develop as a result of a zoonotic disease or animal-related exposure, persons should report the problem to Student/Employee Health (N-128) [report to UMC Emergency Room after-hours and on weekends].

Print: _____ Signature: _____ Date: _____
UMMC Contact _____