

IACUC SOP:	Statement on IACUC Adequate Animal Care	
SOP #109.00	IACUC Approval: 6/18/2024	IO Approval: 6/27/2024

Purpose:

The purpose of this SOP is to describe the Institutional Animal Care and Use Committee’s (IACUC) policy and procedures for conducting semi-annual facility inspections and program review.

Scope:

This SOP applies to all members of the IACUC (regular, alternate, or *ex officio*), as well as the Institutional Official (IO) for Texas A&M University-San Antonio (A&M-SA).

The Guide for the Care and Use of Laboratory Animals (the Guide, NRC 2011) states: “Animals should be housed in facilities dedicated to or assigned for that purpose, not in laboratories merely for convenience. If animals must be maintained in a laboratory to satisfy the scientific aims of a protocol, that space should be appropriate to house and care for the animals and its use limited to the period during which it is required.” (p. 134).

A&M-SA Institutional Animal Care and Use Committee (IACUC) has developed the following policy to provide guidance regarding the requirements for establishing and maintaining animal housing facilities in a manner compliant with federal regulations and expectations. The design of animal facilities combined with appropriate animal housing and management are essential contributors to animal well-being, the quality of animal research and production, teaching or testing programs involving animals, and the health and safety of personnel.

All animal housing areas will be inspected by the IACUC at least once every six months as per federal regulations. Specific questions regarding housing and husbandry should be referred to the Office of Research Compliance and questions regarding general animal use practices should be referred to the A&M-SA Animal Welfare Program.

The references used for the development of this policy include the Guide for the Care and Use of Laboratory Animals (the Guide, NRC 2011), The Guide for the Care and Use of Agricultural Animals in Research and Testing (The Ag Guide, 2010) and the Animal Welfare Act Regulations (AWA).

Definitions

Animal Housing Location/Area: Any area where A&M-SA research or teaching animals are housed for more than 12 hours.

Centrally Managed Animal Housing Facilities: An IACUC-approved animal facility designed specifically for animals and managed by professional animal care staff. The use of centrally managed facilities should be considered the first option for housing animals at A&M-SA. Contact the Director of Research Compliance for a list of the A&M-SA centrally managed animal facilities.

Animal Use or Study Location/Area: Animal Use or Study Areas are laboratories, chambers, surgery rooms or other rooms where live animals are taken outside of the animal housing location for less than 12 hours. These areas are subject to review and approval by the IACUC committee at least every three years and typically visited as part of the semi-annual IACUC site visit process.

Satellite Animal Housing Location/Area: A satellite animal housing location is a building/room/area outside of the centrally managed animal housing facilities where live animals are housed for more than 12 hours. These satellite animal facilities are primarily principal investigator (PI) managed facilities.

Principal Investigator Managed Animal Housing Location/Area: Any investigator managed building, room, area, enclosure, or other containment site in which animals are housed for periods longer than 12 hours. It is the responsibility of the PI to ensure that all federal and institutional requirements and expectations are followed and implemented consistently. The majority of principal investigator managed facilities are considered satellite locations.

Background

The IACUC is mandated by federal law (Public Health Service (PHS) Policy and USDA Animal Welfare Act (AWA) to review the Institution's animal research program components, facilities, and animal use areas. In performing this review on a regular basis, the IACUC ensures animal well-being of the animals and compliance with Federal Regulations and Guidelines. The AWA and PHS policy require that these reviews occur at least once every six months.

Policy

All animal housing and procedure areas must be approved by the Institutional Animal Care and Use Committee (IACUC) prior to use and are subject to semi-annual inspections by the IACUC; regular animal welfare rounds by the Office of Research Compliance; when applicable-inspection by the USDA-APHIS Veterinary Medical Officer; tri-annual visits by the AAALAC-International accreditation team; and other visits and inspections that are deemed necessary (Office of Laboratory Animal Welfare/Public Health Service, Department of Labor and Industries, etc.).

If the housing needs of an animal species or protocol cannot be adequately met within a A&M-SA centrally managed animal facility, the Principal Investigator (PI) must request approval from the A&M-SA IACUC to establish a specialized animal housing location. Once approval is granted – the PI assumes the responsibility for adequate animal care. The housing location(s) and justification must also be included in the IACUC approval.

Separation by health status and species

- Physical separation of animals by species is recommended to prevent interspecies disease transmission and to eliminate the potential for anxiety and physiologic and behavioral changes due to interspecies conflict.
- Separation is usually accomplished by housing different species in separate rooms, but in some instances, it may be possible with cubicles, laminar flow units, cages that have filtered air or separate ventilation, or isolators.
- It may also be acceptable to house different species in the same room—for example, two species that have a similar pathogen status and are behaviorally compatible or aquatic species, as long as nets and other animal handling devices remain separate between systems.

Quarantine

- All animals must be quarantined unless acquired from a pre-approved source.
 - Animals from pre-approved sources must still follow acclimation [SOP 104.00](#).
- Quarantine facilities should be designed to provide physical barriers to the spread of infectious diseases (e.g., unidirectional airflow). That is especially important when the research and quarantine

facilities are parts of a single building. It is preferable for a quarantine facility to have its own animal-care technicians; however, if this is not possible, quarantined animals should be cared for last.

Steps for Satellite Housing Location Approval

- Departmental approval for the space assignment.
- Satellite location(s) and justification is included in the approved animal use protocol.
- Identification of personnel involved in animal care management and husbandry.
- Animal Care Plan with approval by the Veterinarian or Designee. Animal care that is associated with exceptions to the Guide, Ag Guide or AWA require IACUC approval.
- Institutional Biosafety Committee (IBC) and Research and Academic Environmental Health and Safety (RAEHS) approvals as needed if associated with use of a hazard.
- Completed mandatory training for personnel.
- Access or keys provided to the Veterinarian, IACUC Staff, and RAEHS
- Final site inspection and approval by the IACUC

Components of the Animal Welfare Assurances

- A written Animal Welfare Assurances is required for each satellite housing location. It must include standard operating procedure (s) (SOP(s) to address the topics described in this policy.
- *Topics to include in the Animal Care Plan are described below.*
 - Personnel Training (Staff, Students, Volunteers, Faculty, etc.)
All IACUC mandated training must be completed and documented prior to assuming responsibility for animal care. For information regarding training requirements and resources can be found at A&M-SA IACUC webpage.
 - Safety training must be included as mandated through the IBC, RSO and RAEHS if animal use is associated with use of a hazard.
 - Training records need to be made available on request to the Veterinarian, Office of Research Compliance staff and regulatory officials.
- *Daily Care of Animals*
 - All animals must be cared for and observed at least daily, including weekends & holidays.
 - Daily animal care/observation must be documented and recorded in ink.
 - Exceptions to daily observation and care must be described and justified in your Animal use protocol and have prior approval by the IACUC.
 - Abnormal (ill, injured, or abnormal behavior), deceased animals and facility issues that impact animal welfare that are identified during daily care must be promptly reported to IACUC office iacuc@tamusa.edu.
- *Environmental Monitoring of Temperature, Humidity and Ventilation*
 - The area where the animals are housed should be suitable for that species. Indoor climate-controlled housing areas must be monitored daily to ensure proper environmental parameters (i.e. temperature, humidity, ventilation, etc.) are being maintained.

- A minimum/maximum thermometer & hygrometer should be placed in each animal room and the temperature and humidity readings recorded daily. Refer to The Guide, the AWA or the Ag Guide for species-specific requirements on environmental parameters or contact IACUC Office.
 - For rodents, investigators should be aware of the effects of low relative humidity and mitigation.
 - Ventilation rates of indoor housing areas are measured as needed and at least every 3 years. Aquatic species housing is typically excluded from monitoring
 - Documentation of environmental monitoring is not required for livestock and wildlife housed in barns, pastures and other outdoor housing locations but adequate ventilation and housing must be provided as described in the Ag Guide.
- *Veterinary Care of Animals*
 - The Veterinarian & designees must have access to all animals in all facilities approved for animal housing and use.
 - IACUC Office and Veterinarian must be informed of all abnormal animals at A&M-SA. Use the Notification Protocol detailed on the IACUC website.
 - If a health issue is listed on an IACUC SOP, or a protocol specific issue then proceed with treatment AND notify the IACUC office.
 - Personnel involved in medical assessments and treatments should have documented training or experience through IACUC Office or other source.
 - If the health problem is not listed on an IACUC approved SOP or protocol, a veterinarian must be called to assess and develop a medical treatment plan. All medical treatment plans must be documented in the animal health record.
- *Water, Feeding and Storage of Feed*
 - Feed animals non-expired, palatable, non-contaminated, and nutritionally adequate feed daily or according to their species requirements.
 - Maintain a written SOP with feeding instructions including amount and frequency.
 - Open bags of feed must be stored in enclosed, vermin-proof containers. Label feed containers with type of feed and milling date (if feed is not milled, use the date of purchased/acquisition).
 - For agricultural animals & wildlife, feed storage should be maintained to prevent chemical, water and vermin contamination and to limit microbial growth.
 - Environmentally controlled areas used for feed storage must be monitored using a minimum/maximum thermometer/hygrometer and documented daily.
 - Animals should have access to potable, non-contaminated drinking water as required by the species.
 - Deviations from standard feeding practices must be approved by IACUC on the protocol.
- *Space Requirements and Environmental Enrichment*
 - Housing space requirements are detailed in The Guide, the AWA and the Ag Guide and vary by species, number in a group and sizes of animals.
 - Environmental Enrichment is needed to enhance animal well-being and encourage species specific behavior. Refer to The Guide, the AWA and the Ag Guide.
 - Exceptions to the space requirements and enrichment must have prior approval by the IACUC.

- *Illumination*
 - Indoor animal housing areas should be equipped with controlled lighting systems that provide regular diurnal cycles. Inadvertent light exposure during the dark cycle should be avoided.
 - Illumination should be sufficient for the animal's well-being, while permitting good housekeeping, adequate animal inspection, and safe working conditions.
 - Exceptions to illumination standards in The Guide, the AWA and the Ag Guide must have prior approval by the IACUC.
 - Contact IACUC Office for species specific recommendations and light measurements. Light levels are measured at a minimum of every 3 years for all indoor housing areas.

- *Sanitation and Housekeeping*
 - Cages/enclosures must be sanitized regularly to provide a healthy environment for the animal.
 - The Guide standard states that enclosures and accessories should be sanitized at least once every 2 weeks.
 - ❖ For rodents, solid bottom caging, bottles and sipper tubes usually require sanitation at least once a week and forced ventilation rodent caging is typically sanitized every 2 weeks. Other circumstances may require more frequent sanitation.
 - ❖ Ammonia, temperature, and humidity testing can be performed to help develop a sanitation schedule.
 - If in a laboratory or similar space, a specific location should be designated solely for animal housing and be free of clutter and hazards.
 - The location should have surfaces that are easily sanitized. These surfaces should be wiped clean daily and sanitized at least weekly.
 - The written Animal Care Plan must include the enclosure sanitation and room cleaning schedule for the location. Cleaning duties must be documented when performed.

- *Pest Control*
 - Notify IACUC office promptly if any pests are noted in the animal facilities.

- *Waste Disposal*
 - Investigators are responsible for proper disposal of conventional and hazardous waste.
 - Hazardous waste containers (sharps, biohazard, chemical, flammable, radioactive) must be leak proof and adequately labeled.
 - Contact Waste Management for your campus for assistance. For off-campus locations – waste disposal should be in accordance with local regulations, ordinances, and policy.

- *Animal Transportation, Acquisition, Disposition, and Identification*
 - Please refer to the following A&M-SA IACUC SOP:
 - [Animal Transportation SOP 105.00](#)
 - Animals should be clearly identified that include name of responsible investigator(s), source, species/strain/breed, number of animals in cage/enclosure, approved IACUC protocol # (ASAF), and information such as birth/age, arrival, and surgery dates (where applicable). Fish, amphibians and rodents may be identified as group. If there is only one PI or ASAF housing in the room, there can be a posted notice in the room with all the common information (PI, ASAF, species, etc.) and then individual cage or tank identifiers.

Acclimation and Stabilization of Animals

- The standard minimum acclimation time for rodents is 3 days and for non-rodent mammals is 7 days.
- Additional time may be advised to stabilize animals to the environment. Variables are animal type, source, transport conditions and nature of research.

Animal Numbers and Tracking Procedures

- Federal regulations require that institutions account for all animals used or produced under an IACUC protocol. Refer to the IACUC Guideline for counting animals for additional information.
- Investigators and facility management must track the number of animals used within each USDA pain category B, C, D, or E.
- For satellite housing locations, animal numbers are collected on a quarterly basis.

Signage, Emergency information and Security

- All animal housing areas must have the A&M-SA-IACUC Guidelines for Reporting Concerns About The Care and Use of Animals Policy and the Office of the Research Compliance contact Information posted.
- Any signage required for existing chemical, biohazard and radiation hazards must be kept current. If the hazard status changes, the signage must be updated.
- *Emergency information* must include office and after-hours phone contact numbers for PI, research staff, fire, ambulance, police, DRC, IO, veterinarian contact.
- *The animal study area and satellite animal housing facilities* should be secure with access restricted to authorized personnel only.
- *Adverse Event and Disaster Plan*: All animal housing areas must have a written plan that addresses potential adverse events, emergencies, and disasters. Individuals responsible for daily animal care must have access and be trained on this plan.

▪ *Additional Information*

Husbandry practices which are exceptions to the standards described in The Guide, the AWA, the Ag Guide and institutional policies must be described and approved in the Animal Use Protocol.

To acquire a copy of the Guide for the Care and Use of Laboratory Animals

<https://grants.nih.gov/grants/olaw/guide-for-the-care-and-use-of-laboratory-animals.pdf>

References:

[Guide for the Care and Use of Agricultural Animals in Research and Teaching](#)
[Animal Welfare Act](#)
[Public Health Service Policy](#)

History:

Version 01 - Initial approval: 06/16/2022

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Version 02 – approved 06/18/2024

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