



TEXAS A&M UNIVERSITY SAN ANTONIO

IACUC SOP:	Statement on Acclimation
SOP#104.00	IACUC Approval: 8/7/2025

Purpose:

To clarify **minimum** acclimation periods for animals and ensure that newly arrived animals are provided an adequate acclimation period to allow them to stabilize to their new environment. The goal of acclimation is to allow animals to recover to a stable physiological and behavioral state prior to experimentation so that an animal's response will mimic that which is more normal and uncomplicated by stress.

Scope:

This SOP applies to all research personnel and protocols subject to oversight by Texas A&M-San Antonio (A&M-SA).

Responsibilities:

All personnel are required to adhere to all applicable federal, state, local laws or guidelines governing animal research, (e.g. Animal Welfare Act and Regulations (AWA), the Public Health Service Policy on Humane Care and Use of Laboratory Animals, Principles for the Care and Use of Animals Used in Testing, Research and Education, *Guide for Care and Use of Laboratory Animals* and the Health Research Extension act of 1985) as well as all Institutional policies, Standard Operating Procedures (SOP)s and guidelines. In addition, all personnel must follow the approved protocol or seek approval for modification prior to conducting research.

Background:

Researchers must be aware that the minimum acclimation times cannot ensure that all physiological and behavioral changes caused by transport will have stabilized during these periods because comprehensive studies to identify all the physiological changes associated with transportation have not been published to date. This applies to all animals involved in teaching, testing, and research at A&M-SA locations.

SOP:

All newly arrived animals from off-campus are to be provided with the minimum acclimation periods described in this SOP.

Requirements

Listed below are the **minimum** acclimation periods for animals newly received at A&M-SA. Adequate acclimation times vary depending on type of animal, history, health status, source, method and length of transport



to A&M-SA and nature of research. Investigators are strongly encouraged to allow additional time for animals to stabilize in their new environment. Questions regarding acclimation can be directed to the Office of Research Compliance. **Exceptions to this policy must be described and justified on your Animal Subjects Approval Form and approved by the IACUC.** Failure to allow animals to acclimatize properly could adversely impact animal health and research data.

For all species—**The PI is advised to consider the effect that shipping stress may have on the experimental data and benefit of allowing the animal to acclimate for the recommended period.** Temporary exceptions for the acclimation period can be approved by the IACUC Chair on a case-by-case basis.

Acclimation Periods

- 1. Rodent, Zebrafish, and *Xenopus* Species:** Acclimation period of three days (72 hours). Specific research models may require a longer acclimation period depending upon length of transport, procedures performed, and physiological or behavioral parameters studied. Note that rodents arriving from sources other than approved commercial SPF rodent vendors need to be placed in quarantine upon arrival, thus will acclimate during that period.
- 2. All other Laboratory, Agricultural, and Wildlife Species:** Acclimation period of 3 days excluding the day of arrival but with a recommendation of at least 7 days. Investigators should conduct a careful review regarding the type of species (including age, history and current health status) as well as the method/duration of transportation, the procedures performed, and the intended animal use to determine appropriate acclimation times.

Exemptions

- 1.** Euthanasia and tissue harvest are allowed on day of arrival for any species.
- 2.** Non-survival surgery or other terminal non-survival procedures for any species are allowed on the day after arrival.
- 3.** Age/time-dependent procedures which require the use of neonatal chicks, calves, foals, lambs, kids, and swine less than 10 days of age are allowed on the day of arrival.

References:

- Arts, Johanna WM, et al. "The impact of transportation on physiological and behavioral parameters in Wistar rats: implications for acclimatization periods." *ILAR journal* 53.1 (2012): E82-E98.
- Aguila, H., Pakes, S., Lai, W. & Lu, Y.-S. The effect of transportation stress on splenic natural killer cell activity in C57BL/6J mice. *Laboratory animal science* 38, 148-151 (1988).
- Ball, Roberta Scipioni. "Issues to consider for preparing ferrets as research subjects in the laboratory." *ILAR journal* 47.4 (2006): 348-357.



TEXAS A&M UNIVERSITY SAN ANTONIO

- Capdevila, S., et al. "Acclimatization of rats after ground transportation to a new animal facility." *Laboratory Animals* 41.2 (2007): 255-261.
- Conour, Laura A., Kathleen A. Murray, and Marilyn J. Brown. "Preparation of animals for research—issues to consider for rodents and rabbits." *ILAR journal* 47.4 (2006): 283-293.
- Landi, M. S., Kreider, J., Lang, C. & Bullock, L. Effects of shipping on the immune function in mice. *American journal of veterinary research* 43, 1654-1657 (1982).
- Lee, S. et al. Body weight changes of laboratory animals during transportation. *Asian-Australasian Journal of Animal Sciences (AJAS)* 25, 286-290 (2012).
- Meunier, LaVonne D. "Selection, acclimation, training, and preparation of dogs for the research setting." *ILAR journal* 47.4 (2006): 326-347.
- Obernier, Jennifer A., and Ransom L. Baldwin. "Establishing an appropriate period of acclimatization following transportation of laboratory animals." *ILAR journal* 47.4 (2006): 364-369.
- Ruiven, R. v., Meijer, G., Van Zutphen, L. & Ritskes-Hoitinga, J. Adaptation period of laboratory animals after transport: a review. *Scandinavian Journal of Laboratory Animal Science (Denmark)* (1996).
- Smith, Alison C., and M. Michael Swindle. "Preparation of swine for the laboratory." *ILAR journal* 47.4 (2006): 358-363.
- SunBo, S. et al. Effects of air transportation cause physiological and biochemical changes indicative of stress leading to regulation of chaperone expression levels and corticosterone concentration. *Experimental animals* 58, 11-17 (2009).
- Swallow, J. et al. Guidance on the transport of laboratory animals. *Laboratory Animals* 39, 1-39 (2005).
- Van Ruiven, R. et al. The influence of transportation stress on selected nutritional parameters to establish the necessary minimum period for adaptation in rat feeding studies. *Laboratory animals* 32, 446-456 (1998).

History:

Version 01 - Initial Approval: 3/4/2022; IO Approved 6/3/2022

Version 02- approved 8/7/2025