

Acclimation of Research Animals		
Policy Approval Date: 5/10/2021	2 Pages	Next Review Date: 05/10/2024
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Purpose

The purpose of this policy is to identify an acclimation period for research animals following transport to Downstate. In order to prevent additional stress to recently transported animals and to avoid confounding of research data due to a lack of homeostasis following shipping, SUNY Downstate Health Science University has established acclimation guidelines. Healthy, well-stabilized animals provide reliable and repeatable data.

Animals coming from outside sources, other than those exempted below, shall be allowed a period of rest for physiological, psychological and nutritional stabilization before their use. Based upon descriptions in the veterinary literature, animals may not return to baseline physiologic parameters for more than 14 days following transportation to a novel environment. The length of acclimation depends on various factors such as the type and duration of animal transportation, species involved, and housing, feed and intended use of the animals.

The completion of the acclimation period is not a replacement for a quarantine period, although the acclimation and quarantine periods may run concurrently.

Policy

A minimum of **72 hours** must be provided for acclimation for all species arriving from outside sources prior to research procedures.

Policy Exemptions

Certain groups of animals may be exempt from these guidelines, including:

1. Those for which the PI receives an exemption from the IACUC after providing scientific justification stating why acclimation is not necessary for the animal use.
2. Those undergoing terminal procedures on the same date of arrival. Note: the research team should consider the effect that transportation stress may impart on the experimental data outcomes.
3. Those which are wild-caught and will be returned to the wild after procedures. Acclimation is not advised in wild animals that will be released.

Background

From the *Guide for the Care and Use of Laboratory Animals*: Regardless of whether the animals are quarantined, newly received animals should be given a period for physiologic, behavioral, and nutritional acclimation before their use (Obernier and Baldwin 2006). The length of time for acclimation will depend on the type and duration of animal transportation, the species, and the intended use of the animals. For animals not typically housed in research settings, consideration should be given to providing means to assist with their acclimation (e.g., shearing sheep before they are brought indoors). The need for an acclimation period has been demonstrated in mice, rats, guinea pigs, nonhuman primates, and goats, and time for acclimation is likely important for other species as well (Capitanio et al. 2006; Conour et al. 2006; Kagira et al. 2007; Landi et al. 1982; Prasad et al. 1978; Sanhoury et al. 1989; Tuli et al. 1995).

REFERENCES

1. Conour LA, Murray KA, Brown MJ. Preparation of Animals for Research: Issues to Consider for Rodents and Rabbits. *ILAR* 47 (4): 283-293, 2006.
2. Obernier, JA. 2006. Establishing an Appropriate Period of Acclimation following transportation of laboratory animals *ILAR* 47(4): 364-369.
3. *The Guide for the Care and Use of Laboratory Animals*, 8th Edition. NRC, 2011; page 111.