



Stabilization of Animals before Use

369.1 Purpose

Newly received animals should be given a period for physiologic, behavioral, and nutritional acclimation before their use, regardless of whether the animals are quarantined. Healthy, well-stabilized animals provide reliable and repeatable data.

369.2 Definitions of Key Terms Specific to this Policy

369.2.1 Emory University animal facility – Includes animal facilities located in buildings at Emory University, Yerkes Main Station, Yerkes Field Station, and Wesley Woods.

369.2.2 Stabilization – The interval of time permitting the restoration of homeostasis and normal behavioral and/or physiologic function following a disruptive event or stressful experience and, where applicable, also allowing for subsequent adaptation to a new environment.

369.2.3 Approved Vendor - Please contact Division of Animal Resources or Yerkes National Primate Research Center for additional information regarding ordering animals from the Approved Vendors lists.

369.3 Applicability

This policy applies to all Emory research, teaching, or testing animal activities that fall under the Emory University IACUC's jurisdiction.

369.4 Procedure

The *Guide for the Care and Use of Laboratory Animals*¹ states: “The researcher, in conjunction with the IACUC and veterinary staff, shall evaluate whether additional time for stabilization would be necessary and appropriate during the review of the protocol. 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.”

Following receipt of animals from an approved vendor to an Emory University animal facility, animals should

¹ Guide for the Care and Use of Laboratory Animals, Eighth Edition; National Research Council, 2011, pg. 111.

² Arts JW, Kramer K, Arndt SS, Ohl F. The impact of transportation on physiological and behavioral parameters in Wistar rats: implications for acclimatization periods. *ILAR Journal* 2012; 53(1):E82-98.

³ Bundgaard CJ, Kalliokoski O, Abelson KS, Hau J. Acclimatization of mice to different cage types and social groupings with respect to fecal secretion of IgA and corticosterone metabolites. *In Vivo* 2012; 26(6):883-8.

⁴ Hoorn EJ, McCormick JA, Ellison DH. High tail-cuff blood pressure in mice 1 week after shipping: the need for longer acclimation. *American Journal of Hypertension* 2011; 24(5):534-6.

be maintained in their home cages/pens for at least 72 hours prior to use in teaching or research activities to allow for a period of initial physiological, psychological, and nutritional stabilization. Depending upon the nature of the research, periods of acclimation of up to 4 weeks may be necessary²⁻⁴. Animals acquired as breeding stock may be organized in breeding groups at arrive. Those arriving from unapproved vendors or other institutions must go through a period of quarantine. There is no need for additional stabilization following the quarantine period. Stabilization of animals under the terms of this policy is not required when transporting animals between buildings on the Emory University campus.

While a 72 hour acclimation period may be appropriate in many circumstances, investigators are advised to know and understand the stability and resiliency of their animal model system(s) to the stress of transportation and take this into consideration in the preparation, conduct and publication of experiments.

Exemptions from this policy to eliminate or shorten the stabilization period may be allowable in certain circumstances. One example of this exemption would be instances where animals are received and euthanized for the purpose of tissue collection all in one day. This is allowable with written or email notification addressed to one of the animal facility veterinarians or the IACUC office.

369.5 Document Properties

Authored by: IACUC
Administering Division/Department: IACUC Office
Original Approval Date: 07/28/2005
Last Revision: 06/19/19
Version: v.20190619