



ACUP ID number: EP-5		
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Revision by: (numbered accordingly)	**	**
Distribution	All	

EP-5: Acclimation Period Guidelines for Newly Received Laboratory Animals

Scope: Vendor/Imported animals, Significant transport as determined by veterinarians (ex. imports, vendors etc)

Background:

- Stress associated with transportation can have widespread effects on physiological systems in laboratory animals including changes in the cardiovascular, endocrine, immune, central nervous and reproductive systems. While usually short-lived, these changes can confound research if animals are utilized before homeostasis is restored and physiologic measures return to normal. Therefore, some period of acclimatization following transportation is recommended. Elevations from baseline physiological measures generally return to normal within 1-7 days, however, animals that are young, severely stressed, and/or express stress-sensitive genotypes may show altered physiological measures for several weeks.
- Per the Guide for the Care and Use of Laboratory Animals: “Newly received animals should be given a period for physiologic, behavioral, and nutritional acclimation before their use. 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. 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. Animals newly received into the animal facilities should be given a period of acclimation to ensure physiologic, psychological, and nutritional stabilization before their use.”

Guidelines:

- All Species ^{1, 6, 7}:
 - Euthanasia and tissue harvest may be performed on the day of arrival.
 - Non-survival surgery or other terminal non-survival procedures can also be performed the day of arrival, but investigators should consider the effect that shipping stress may have on the experimental data.
- Rodents/Non-mammalian Vertebrates:

- All rodents/non-mammalian vertebrates should have an acclimation period of a minimum of 72 hours (3 days) after arrival and prior to use for experimental purposes unless justified in an ACUC approved animal protocol^{2,4,5,8,10}.
- USDA-Covered Species/Larger Mammals: All USDA-covered species should have a minimum of 7 days of acclimation upon arrival before being used for experimental purposes unless justified in an ACUC approved animal protocol. This includes internal sale of nonhuman primates that requires the transport to different Hopkins facilities for research (e.g., between the JHU Breeding Farm and East Baltimore campuses)^{2,3,9,10}.
- Exceptions:
 - The ACUC may grant exceptions to the acclimation period if such exceptions are scientifically justified and outlined in the protocol.
 - The attending veterinarian or his/her designee may shorten or waive the acclimation period on a case-by-case basis.
 - Transport of animals involved in clinical cases requiring treatment at the discretion of the veterinarian.

References:

1. 8th edition of The Guide for the Care and Use of Laboratory Animals, pg 111. (Obernier and Baldwin 2006; 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).
2. Conour LA, Murray KA, Brown MJ. Preparation of animals for research--issues to consider for rodents and rabbits. ILAR J. 2006;47(4):283-93.
3. Grandin T, Assessment of Stress During Handling and Transport. J Anim Sci, 75: 249-257, 1997.
4. Obernier JA, Baldwin RL. Establishing an appropriate period of acclimatization following transportation of laboratory animals. ILAR J. 2006;47(4):364-9.
5. Tuli JS, Smith JA, Morton DB, Stress measurements in mice after transportation. Laboratory Animals. 29 (2): 132-8, 1995.
6. USDA Animal Care. Animal Welfare Act and Animal Welfare Regulations.; 2019 pp. 111–121
7. PHS Policy on Humane Care and Use of Laboratory Animals
8. Acclimation Period - UCI Office of Research. Available from: <https://research.uci.edu/animal-care-and-use/policies-and-guidance/acclimation-period/>
9. Acclimation of Large Animals | Research Support. Available from: <https://www.bu.edu/researchsupport/compliance/animal-care/obtaining-and-transporting-animals/acclimation/acclimation-of-large-animals/>
10. NRC Preparation of Animals for Research ILAR 47(4): 281-375, 2006.

I acknowledge that I have read and understand the JHU Animal Care and Use Program document “**Acclimation Period Guidelines for Newly Received Laboratory Animals**” and I will follow this procedure. I agree to bring any deviations in this procedure to the attention of my supervisor/GPS Working Group.

Name (Print)

Date

Signature