GUIDELINE: ACCLIMATION PERIOD FOR RECEIVED ANIMAL TRANSFER/SHIPMENTS

Guideline Statement

“Stress associated with transportation has widespread effects on physiological systems in laboratory animals, including changes in the cardiovascular, endocrine, immune, central nervous and reproductive systems. Although short-lived, these changes can confound research if animals are utilized before homeostasis is restored and physiological measures return to normal.” (Obernier et al., 2006)

Newly received laboratory animals should be held for an acclimatization period of 48-72 hours (depending on the species and procedural use) without undergoing any experimental or other manipulation. This time does not include quarantine periods.

Definitions

Acclimation: Physiological adjustment by an organism to environmental change

Acclimatization: The process in which an individual organism adjusts to a gradual change in its environment (such as a change in temperature, humidity, photoperiod, or pH), allowing it to maintain performance across a range of environmental conditions. Acclimation occurs in a short period of time, and within the organism's lifetime.

Audience

Any researcher, core facility, or regulatory personnel involved with animal research at UNC-CH who receive transferred animals.

Reason for Policy

Transportation and introduction of animals into a vivarium with new housing conditions, changes in social groupings, new feed, and new care staff are potentially stressful events. Animals need a period of time for physiological, psychological, and nutritional stabilization to occur. An acclimation period allows animals time to stabilize in a new environment and promotes both animal welfare and reproducible experimental results. The length of time for acclimation will depend upon the type and duration of animal transportation, the species involved, and the intended use of the animals.
Compliance

When appropriate, acclimatization periods should be described in the corresponding animal protocol.

Roles and Responsibilities

Principal Investigator and Animal Handler: Ensure personnel listed on the approved IACUC are aware of the guideline.

Related Regulations, Statutes, and Related Policies

Guide for the Care and Use of Laboratory Animals: p111

Contacts

<table>
<thead>
<tr>
<th>Subject</th>
<th>Contact</th>
<th>Telephone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guideline</td>
<td>Office of Animal Care and Use</td>
<td>919-966-5569</td>
<td><a href="mailto:iacuc@med.unc.edu">iacuc@med.unc.edu</a></td>
</tr>
<tr>
<td>Guideline</td>
<td>DLAM Veterinarians</td>
<td>919-843-7992</td>
<td></td>
</tr>
</tbody>
</table>

Document History

This section must contain the following dates or placeholders for future dates:

- Effective Date: 11/8/2013
- Last Revised Date: 11/8/2013

Procedures

1. Newly received laboratory animals should be held for a minimum period of 48-72 hours (depending on the species and procedural use) without undergoing any experimental or other manipulation.
2. Contact a DLAM veterinarian if an acclimatization period cannot be utilized for experimental procedures involving newly received animals.
Standards

- Allow newly received animals a minimum acclimation period of 48-72 hours prior to conducting any experimental or surgical manipulation.

Forms

Ensure that all pertinent information in regards to animal transfers and post-shipments is included within the appropriate Animal Care Applications. All animal transfers must be approved by DLAM (including those between UNC animal facilities).

See Animal Transport and Biosecurity Policy for more information.

Other Related Documents

Guide for the Care and Use of Laboratory Animals