



INDIANA UNIVERSITY

Office of Research Compliance (ORC)

Institutional Animal Care and Use Committee (IACUC)

Guidelines on the Exceptions Regarding Husbandry of Laboratory Rodents

The Animal Welfare Act and Regulations require laboratory rodents to be housed and managed according to standards outlined in the *Guide for the Care and Use of Laboratory Animals (Guide)*, NRC 2011. This document outlines common institutionally-accepted husbandry exceptions to the *Guide* for purpose-bred mice of the genus *Mus* and rats of the genus *Rattus*.

Background

Background: The *Guide* recommends cage change intervals of one week for rodents housed in solid bottom cages with the caveat that “some types of caging might require less frequent cleaning or disinfection; such housing may include...ventilated caging.” The *Guide* also indicates that “in general, enclosures and accessories, such as tops should be sanitized every two weeks.” LARC’s husbandry practices regarding cage change intervals on individually ventilated cages (IVCs) represent an exception to the *Guide*’s recommended standards.

Performance standards for these exceptions are assessed collaboratively by veterinary, animal care and research personnel as well as through IACUC semi-annual inspections and post-approval monitoring programs. If at any time LARC staff or investigators have concerns or find that any exceptions outlined here negatively impact animal health or welfare, these concerns should be reported to the IACUC and to LARC. Modifications to this guideline may be made to reflect those concerns if determined to be appropriate by the IACUC.

Current husbandry practices for IVCs are briefly described below. Full information can be found in LARC’s Standard Operating Procedures.

Procedures

Cage bottoms

LARC changes cage bottoms/bedding in IVCs at least once every two weeks at time of cage change. As is standard practice with conventional non-ventilated cages, daily spot-checking of IVCs occurs to ensure an acceptable environment. Cages that are exceptionally dirty – as may occur with high density breeding cages or a water bottle leak – will be changed immediately. The cage-change frequency for IVCs may increase to weekly or more often based on necessitating factors such as diabetic rodents with increased urine output, sensitive phenotypes, for rodents on special diets or bedding or for immediate post-surgical care.

Cage accessories

IVC cage accessories such as microisolator lids, enrichment items, and wire bar feed hoppers are changed at least once monthly when the entire cage unit is replaced during full change out. IVC cage accessories

may be changed more often if needed for special considerations. Accessories that become damaged or excessively worn are replaced immediately.

Water bottles

Water bottles are considered cage accessories and are changed at least once every two weeks for IVCs by LARC. They may be replaced or topped off in-between change-outs to replenish water supply. Water bottles may also be changed more often if medicated water treatments are in use or if needed for special considerations.

References

AAALAC International, FAQ D.2. Cage Sanitation Frequency.
http://www.aaalac.org/accreditation/faq_landing.cfm#C1

Institute of Laboratory Animal Research (ILAR) (2011). *Guide for the Care and Use of Laboratory Animals* (8th ed.). Washington, D.C.: The National Academies Press.

Schondelmeyer, C.W., Dillehay, D.A.L., Webb, S.K., Huerkamp, M.J., Mook, D.M., & Pullium, J.K. (2006). Investigation of appropriate sanitation frequency for rodent caging accessories: Evidence supporting less frequent cleaning. *Journal of the American Association of Laboratory Animal Science*, 45(5), 40-3.

Contact

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