

| Internal Regulation Title | Aseptic Technique in Rodents | | | | | |
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| Date Last Revised | 09/12/2017 | Date Created | 01/28/2005 | Revision # | | |
| Regulation Number | 7 | Required by: | □OHRP □Fund | ding Agency 🗆 |]olaw | |
| Applicability | □ RGC Internal | ⊠Resea | archer | □Institutiona | | |
| Subgroup | 🗆 NKU Complia | nce 🛛 IRB | ⊠IACUC | □IBC | | |

1.0 PURPOSE

The purpose of this regulation is to describe aseptic techniques in rodents.

2.0 GENERAL INFORMATION AND SCOPE

As stated in the <u>Guide for the Care and Use of Laboratory Animals Eighth Edition</u> (hereafter referred to as "the Guide"), appropriate aseptic technique is required for all survival surgeries in vertebrate animals.

Exceptions to this internal regulation or recommendations in *the Guide* must be detailed in the approved IACUC protocol. Scientific justification must be provided for such exceptions.

3.0 DETAILS

Aseptic technique is used to reduce microbial contamination to the lowest possible practical level. No procedure, piece of equipment, or germicide alone can achieve that objective. Standard aseptic technique includes preparation of the animal, such as hair removal and disinfection of the surgical site (alcohol is not regarded as a sterilant or disinfectant); preparation of the surgeon, such as decontaminated surgical attire, surgical scrub, shoe and hair covers, and sterile surgical gloves; sterilization of instruments, supplies, and implanted materials; and the use of surgical techniques to reduce the likelihood of infection. The contribution and importance of each of these techniques will vary with the surgical procedure.

If a non-sterile part of an animal, such as the gastrointestinal tract, is to be surgically exposed or if a procedure is likely to cause immunosuppression, pre-operative antibiotics might be appropriate. However, the use of antibiotics should never be considered a replacement for aseptic procedures.

Aseptic technique for rodents includes the following steps:

- A mask must be worn while performing surgery
- A lab coat or surgical scrubs must be worn during surgery (minimally a surgical scrub shirt may be worn); "street clothes" are not acceptable
- Sterile surgical gloves, hair and shoe covers must be worn
- Surgical instruments must be sterilized prior to initial use
 - o Ensure proper autoclave sterilization with autoclave tape or indicator strips
 - o Glass bead sterilization or chemical sterilant can also be used
- In between animals, the instruments must be sterilized
 - o Glass Bead Sterilization- instruments must be wiped or rinsed with sterile water or saline prior to submersion in the beads

- o Immersion in chemical sterilant instruments must have proper contact time according to manufacturer recommendation, rinse instruments with sterile water or sterile saline after immersion before using in animals
- A portion of the lab must be dedicated for the surgery; other procedures may not be performed in this dedicated space during the surgery
- Animals must be surgically prepared as described in the approved IACUC protocol (e.g. shave hair, alternate betadine and alcohol scrub, etc.)

A sterile field must be maintained throughout surgery. A sterile surgical drape may be used to prevent contact with nonsterile surfaces and aid in maintaining a sterile field. Sterile instruments and gloves must not come into contact with any nonsterile surface (i.e. areas of the animal that have not been surgically prepared, nonsterile areas of the surgical space).

4.0 REFERENCES

Guide for the Care and Use of Laboratory Animals Eighth Edition

5.0 FORMS OR ATTACHMENTS

6.0 DEFINITIONS

| Approvals | | | | | |
|--------------------------------|-------------|---------------|----------------|--|--|
| Title | Approved | Date Approved | Not Applicable | | |
| Manager of Research Compliance | \boxtimes | 06/13/2018 | | | |
| IACUC Chair | \boxtimes | 06/13/2018 | | | |
| Institutional Official | | | \boxtimes | | |

| Revisions | | | | | | |
|--------------------------------|----------|---------------|-----|---------|--|--|
| Title | Approved | Date Approved | N/A | Summary | | |
| Manager of Research Compliance | | | | | | |
| IACUC Chair | | | | | | |
| Institutional Official | | | | | | |