

STANDARD OPERATING PROCEDURES
DIVISION OF COMPARATIVE MEDICINE
UNIVERSITY OF SOUTH FLORIDA

SOP#: 1017

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Page 1 of 3

TITLE:	Surgical Pack Preparation
SCOPE:	All Animal Program Personnel
RESPONSIBILITY:	Facility Manager, all Research and Animal Personnel
PURPOSE:	To Outline the Procedures for Preparation of a Surgical Pack

I. PURPOSE

1. This SOP gives an overview of considerations regarding preparation of instruments and supplies to be used during survival surgery.

II. RESPONSIBILITY

1. The Veterinarians oversee all aspects of animal health.
2. Facility Managers ensure implementation of all procedures.
3. All program staff contribute to successful compliance with this procedure.

III. PROCEDURES

Background

1. **All instruments and supplies must be sterilized prior to use.** Non autoclavable supplies may undergo high level disinfection. The following are acceptable methods currently available at USF:
 - a. **Steam** – must follow manufacture’s recommendations regarding time/temperature/pressure.
 - b. **Chemical high level disinfection** – must follow manufacture’s recommendations regarding solution concentration, contact time and rinsing of agent.
 - c. **Glass Bead Sterilizer** – Sterilizes tips of instruments only

Preparation of Autoclavable Instrument Packs

1. Arrange instruments in a tray, dish, or bowl to protect them and provide a safe storage area for them between surgeries. Provision of two bowls is recommended: one to hold sterile saline for animal use (e.g., tissue lavage) and one for sterile saline for cleaning and storage of instruments between surgical cases. For minor procedures, one bowl may suffice.
2. **Identify general use disposable supplies** to be placed in the pack (e.g., gauze, drapes, cotton tipped applicators, etc.) and provide just slightly more than anticipated use for the planned surgical cases. Inclusion of **excessive disposables is discouraged** as they should not be re-autoclaved; rather, a separate small disposables pack can be made for when need arises.
3. **Identify project-specific consumables** to be placed in the pack, such as *autoclavable* appliances/devices, needles, screws, staples, drill bits, etcetera.

4. Measure and cut a length of blue non-absorbent paper drape adequate to cover intended surgical station to serve as the outer drape; place a folded a blue absorbent chux, a WypAll or several paper towels roughly in the middle of the outer drape. Arrange atop the absorbent material the bowls with instruments placed inside, and all autoclavable disposables, and then bring the outermost drape up and around all items.
5. If possible, it is preferred to fold the outer blue paper drape in an accordion pleated configuration to make it easier to open at the time of use. Tuck the ends underneath.
6. Once folded, slip inside "Seal N Peel" pack and mark with name, date and name/pack contents (e.g., "cath pack"). Please note: do **not date** until the pack is actually autoclaved.

Autoclaving of Packs

1. Standard instrument cycle is 30 minutes at 121 degrees C.
2. "Flash" instrument cycle is 15 minutes at 132 degrees C. This is not recommended for delicate instruments or supplies as they can deteriorate.

Preparation and Surface Disinfection of Non-Autoclavable Supply Pack ("cold pack") with a High Level Disinfectant

1. This type of pack is used to provide high level disinfection of the surface of supplies to facilitate work within the sterile operative field. This should only be used for supplies with a non-porous surface that can withstand complete soaking with an appropriate chemical sterilant. Note, only the surface of the item or package is disinfected, not internal surfaces. This type of pack is most commonly used when conducting batch rodent surgery without an assistant.
2. Identify and gather all non-autoclavable supplies needed for surgical prep and peri-operative support including, but not limited to: supplemental heat source, hydrogen peroxide, lidocaine, sterile saline (100ml bags preferred), heparin flush, dental cements, suture, skin glue, catheters, syringes/needles, adhesive drapes, appliances/devices, collection tubes, etcetera.
3. Inclusion of cage cards to facilitate taping/positioning animal within the surgical station are highly recommended; multiple cards may be included for periodic replacement so that contaminants, blood and loose fur are also removed if the area becomes soiled.
4. Individual pre-packaged sterile items such as suture, syringes, needles, op-sites, etc. do not need to be included in the cold pack but may be. Individual pre-packaged sterile items may be opened or handled as needed by an assistant. These items should be included within the pack when no assistant is available to allow the surgeon to open prepared items as needed without breaking sterility.

Preparing a Surgical Station

1. Prepare a biological safety cabinet or laminar flow hood by spraying liberally with OxivirTb or Metricide and wait 5min or 12min, respectively.
2. Don sterile gloves and open a sterile drape within the hood, then liberally spray all surfaces of outside packaging, containers, and other items to undergo high level disinfection with Metricide OPA as **each item** is introduced into the hood.

3. Arrange items in a **single layer** and **allow sitting in a closed hood for a minimum of 15 minutes** prior to packaging. This ensures appropriate contact time as well as allowing materials to dry prior to sealing the pack. A UV light may be used but is not required.
4. Following the exposure/dry time, turn off the UV light if used, open the sash, don sterile gloves and wrap the sterile paper drape around items in a manner that allows them to be slipped inside a "Seal N Peel" package. The outer "Seal N Peel" package is marked with initials, date and contents/pack name.
5. Devices and catheters may undergo high level disinfection immediately prior to use by soaking in Metricide OPA for 12min and following with sterile saline rinse/flush prior to moving into the sterile surgical station; if included in the cold pack, they should be exposed to Metricide OPA and rinsed prior to inclusion.

Glass Bead Sterilizer

1. See **SOP #1161** entitled ***Germinator™ 500 Glass Bead Dry Sterilizer***.

Opening the Packs

1. **Prepare the surgical station** (hood or countertop) by spraying liberally with Oxiver or Metricide OPA and wait 5 to 12 minutes respectively.
2. **Place the packs within the field** by opening & discarding the outer "Seal N Peel" packaging, taking care to not touch inner contents.
3. **Don sterile gloves** and carefully open each pack's inner layers.
4. Autoclave pack's absorbable chux material is slid to one side (provides a place for instruments to drain post re-sterilization), leaving the blue paper as the main surgical field.
5. Gauze, drapes, cotton-tipped applicators and instruments are removed from their bowls and arranged to the surgeon's liking.
6. Cold pack's contents are arranged within the field as appropriate and using a sterile instrument the saline bag punctured so that saline bowls may be filled.
7. Open any needed individually packaged sterile items (e.g., suture, needles, syringes, adhesive drapes) not in the cold pack and drop within the sterile field.
8. A second sterile paper drape may be opened and used as a secondary sterile field to hold items such as drills and transistors/radios; these items are disinfected by wiping with the chosen hard surface disinfectant and then wrapped in sterile stockinet in a sterile fashion.
9. Begin preparation of animal (sterility is broken at this point) or have an assistant prepare the animal.
10. If sterility has been broken, don new sterile gloves prior to handling anything within the sterile surgical station.

Approved:

Date: