

<b>POLICY NAME</b>	<b>POLICY ON SURVIVAL SURGICAL PROCEDURES IN LABORATORY ANIMALS</b>
<b>Approving Body</b>	Animal Policy and Welfare Oversight Committee (APWOC)
<b>Original Approval Date</b>	April 19, 2024
<b>Last Revision Date</b>	April 19, 2024
<b>Next Review Date</b>	April 19, 2027

<b>Related Documents</b>	
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## 1. PURPOSE

This policy on surgical procedures in laboratory animals outlines the principles, guidelines, and responsibilities for conducting surgical interventions on animals in a research or teaching setting. Surgery is defined as a procedure involving incising into tissues or closure of a previously sustained wound. Survival surgery refers to any surgical procedure by which the animal will regain consciousness.

The purpose of this policy is to ensure the humane and ethical treatment of animals used in scientific research, minimize discomfort and distress, and promote the responsible use of laboratory animals in compliance with [CCAC Policy and Guidelines](#) and [McGill University Policy on the Study and Care of Animals](#).

Note that the use of the words 'should' and 'must' in this Policy is consistent with their defined use in Canadian Council on Animal Care (CCAC) guidelines. The term 'should' indicates an obligation, for which any exceptions must be justified to, and approved by, an Animal Care Committee. The term 'must' indicates a mandatory requirement.

## 2. ETHICAL PRINCIPLES

All research involving surgical procedures on laboratory animals must adhere to the principles of Replacement, Reduction, and Refinement. These principles encourage researchers to replace animals with alternative methods, when possible, reduce the number of animals used, and refine procedures to minimize suffering.

All surgical procedures on laboratory animals must undergo ethical review by the Facility Animal Care Committee (FACC). All personnel performing surgery must be listed on and have thorough knowledge and understanding of the approved Animal Use Protocol (AUP).

## 3. PERSONNEL QUALIFICATIONS

Individuals involved in conducting surgical procedures on laboratory animals must have appropriate training and qualifications. The surgical training program is overseen by the veterinarian and documented.

## 4. SURGICAL FACILITIES

Surgeries must be performed in a dedicated area where aseptic conditions can be maintained, ideally within an Animal Care Facility. Use of extravascular space for surgical procedures must be pre-approved and inspected by the FACC ([Policy on Alternate Laboratory for Procedures and Housing of Animals](#)).

## **5. PRE-SURGICAL CONSIDERATIONS**

- Surgery must be performed on animals that are found to be healthy on physical examination, at the time of the surgery, unless otherwise described in the AUP for symptomatic animals or performed by a veterinarian for therapeutic purposes. General condition, hydration status, and body condition score should be assessed prior to surgery; additional tests may be necessary.
- Animals with clinical concerns or in poor body condition should not undergo anesthesia or surgery without prior consultation with a veterinarian.
- All animals subjected to surgery must be adequately anesthetized and receive appropriate analgesia to minimize pain and distress during the procedure, unless described in the FACC-approved AUP.

## **6. SURGICAL PROCEDURES**

- Use good surgical technique which includes:
  - Aseptic technique, gentle tissue handling, minimal dissection of tissue, appropriate use of instruments, effective hemostasis, and correct use of suture materials and patterns.
  - Appropriate attire (mask, sterile gloves, etc.) should be worn by the surgeon to maintain aseptic technique.
  - Sterile instruments, supplies and any materials that will come in direct contact with the surgical site.
  - A clean environment.
- Where serial surgeries are approved, e.g., rodents, sterile packs may be used for up to 6 procedures if approved in the AUP.

## **7. POST-OPERATIVE CARE**

Animals should be provided with appropriate post-operative care and monitoring to ensure they recover safely and without complications. This includes pain management, wound care, and close observation for any signs of distress or infection.

Any adverse events or complications arising from surgical procedures on laboratory animals must be promptly reported to the veterinarians and documented. This information must be used to refine future procedures.

## **8. RECORD KEEPING**

Accurate records of all surgical procedures, including details of anesthesia, analgesia, surgery, and post-operative care, must be maintained. These records should be readily available for inspection in a format accessible to investigators, veterinarians, animal care personnel, and animal care committees.

## **9. REPORTING AND ACCOUNTABILITY**

Failure to adhere to this Policy must be reported to the FACC.

## **10. REVIEW**

Mandatory review periods: every 3 years.