Policy Number: 1.6

Policy Title: Reporting and Investigating Unexpected Outcomes or Adverse Events

Section 1: Purpose

A comprehensive animal care program includes the acknowledgment that unexpected events happen; but investigators, animal care personnel, and anyone who is affiliated with the program is able to identify and promptly report these events as part of their commitment to promoting animal welfare. The IACUC is required to conduct “continuing protocol review” which includes the receipt and review of "adverse or unanticipated events." (Guide, p. 33-34)

This policy is intended to assist researchers, facility managers, and animal care personnel in defining adverse events or unexpected outcomes and provides guidance on reporting these events to the IACUC. This policy also provides the IACUC with a basic framework for evaluating those events.

Section 2: Scope

This policy applies to all IACUC approved animal activities, all personnel working within Clemson’s animal program, and all facilities inspected by the IACUC on a semiannual basis.

Section 3: Policy

Adverse Events
An adverse event is an unexpected incident that endangers the well-being or leads to the harm of animals utilized by the University's animal program. Examples of adverse events may include:

- Natural disasters
- Mechanical failures
- Animal husbandry issues
- Accidents or human error

Unexpected Outcomes
A well-planned AUP identifies potential outcomes that may reasonably occur within the parameters of the experimental procedures. Unexpected outcomes are undesirable effects that occur during or result from a research procedure or teaching activity. These undesirable effects negatively impact animal welfare and were not anticipated during the planning of the research or teaching activities. Examples of an unexpected outcomes may include:

- Higher than expected mortality associated with the administration of a test substance
- Device/implant failure
- Unexpected phenotypes of genetically modified animals that are detrimental (malocclusion, impaired immunity, unexpectedly high mortality of offspring)

**Veterinary Authority**
Immediately after an adverse event or unexpected outcome, the Attending Veterinarian has the authority to pause a procedure or study until the IACUC has reviewed information pertaining to the issue when animal welfare is a concern.

The AV has the authority delegated by the IO & the IACUC to assess animals, treat animals, remove them from an experiment, institute appropriate measures to relieve pain or distress, or perform euthanasia if necessary.

**Reporting Requirements (Internal to the animal program)**
The Principal Investigator (PI) of the involved protocol(s) is responsible for ensuring that reporting of adverse events or unexpected outcomes is prompt and complete. Facility managers or personnel may also report information to the IACUC pertaining to adverse events or unexpected outcomes.

All adverse events or unexpected outcomes should be reported to the Attending Veterinarian (AV) and the IACUC Administrator in writing within 72 hours of the occurrence. This written statement should include:
- The identification of the animal(s) involved
- The protocol(s) affected by the event or outcome
- A detailed description of the event
- A description of actions taken to eliminate, modify, or mitigate repetition of the event or outcome
- A description of any efforts to increase monitoring of animals.

In the event of a major disaster or emergency that precludes prompt communication, the 72-hour reporting requirements may be extended. In these situations, reporting should occur as soon as circumstances allow.

Following the AV’s response, a formal Incident Report must be completed and submitted in InfoEd. The report should include:
- A description of the event
- Immediate steps taken to address the outcome of the event
- Assessment/root cause of the event
- Corrective steps taken to prevent recurrence.

An amendment may need to be completed if the AUP should be updated to reflect corrective steps that result in a change to approved procedures.

**IACUC Evaluation of an Adverse Event or Unexpected Outcome**
The general procedure for the review of adverse events or unexpected outcomes is illustrated in the matrix below. The procedure may vary depending on the situation and severity/extent of the event.
Reporting Requirements (External to the animal program)
At any point during the evaluation of adverse events or unexpected outcomes, the IACUC/AV/ORC may report or may be required to and will report the event to relevant University offices, regulatory oversight agencies (OLAW and/or USDA), AAALAC International, and/or funding sources.

Research Misconduct
If the reported incident involves fabrication or falsification of research data or an accusation of plagiarism, the incident will be reported to the Research Integrity Officer as an allegation of Research Misconduct.

Section 4: References

Clemson’s Whistleblower policy:
https://media.clemson.edu/administration/compliance/whistleblowerpolicy.pdf

Guide for the Care and Use of Laboratory Animals, Eighth Edition
Adverse Event or Unexpected Outcome Evaluation Flow Chart

A report of an adverse event or unexpected outcome is received.

The report will be communicated to the IACUC Administrator, AV, IACUC Chair, and the Director of Research Compliance. An initial review of the event will occur. This review will determine if the event/outcome has been sufficiently addressed, if additional information is needed, or if immediate IACUC action is required.

- **Sufficiently Addressed**
  - If the event/outcome has been sufficiently addressed, the occurrence will be communicated to the IACUC either in the veterinary report or as a separate agenda item at the next convened meeting.

- **Additional Information Needed**
  - If additional information is needed, the PI, research personnel, or facility personnel may be contacted. This information will be reviewed by the IACUC Administrator, AV, IACUC Chair, and the Director of Research Compliance. Repeated communications may be made until sufficient information is obtained.

- **Immediate Action Required**
  - If immediate action by the IACUC is warranted, the IACUC Administrator will schedule an emergency meeting of a quorum of members. If needed, animals may be placed under emergency care of the veterinarian.
    - At the convened meeting, the IACUC will determine the appropriate course of action. Requirements will be communicated to the PI by the IACUC Administrator or ORC Director.
      - The PI must fulfill all requirements determined by the committee and is required to provide updates to the IACUC Office. Updates will be provided to the Committee during subsequent planned meetings or through email.
        - The PI will be notified when the Committee agrees that all concerns have been addressed. Failure to adhere to the corrective actions assigned by the committee will be handled as a non-compliance.