ANIMAL CARE COMMITTEE
Policy ACC-005 - Monitoring Records of Held Animals

Purpose

1. This policy outlines requirements for appropriate monitoring of animals held for research, teaching, or testing. This policy is intended to assist investigators in fulfilling the expectations of the VIU Animal Care Committee (ACC), in maintaining welfare standards in Animal Use Protocols (AUPs), and for keeping appropriate records.

2. Monitoring (health and welfare assessment and record keeping) is a necessary step in safeguarding animal welfare. Effective monitoring helps detect welfare concerns in the early stages and minimizes suffering and improves quality of data by reducing confounding effects resulting from stressed and sick animals. The use of well-designed monitoring records provides a systematic basis for evaluating changes in an animal's condition and ensures all relevant variables are assessed. Continued use of the same "checklist" ensures consistency when monitoring is performed by more than one individual and continuity of care over time. These records provide valuable data and can be used for future reference to refine animal activities and refine monitoring procedures and endpoints.

SCOPE

3. This Policy applies to all Vancouver Island University (VIU) Persons, which means those participating in scholarly activity, including full-time and part-time faculty, staff and students (including, without limitation, clinical faculty, visiting professors, and any persons enrolled in any degree, non-degree, diploma, certificate, or residency program at VIU) or any person who teaches, conducts research, or works at, or under the auspices of VIU.

4. This policy applies to all animals used in research, teaching, testing or breeding housed in VIU animal facilities, or any other facilities that fall under the review of VIU Animal Care Committee (ACC). Holding time may vary from short-term (1 day) to long-term (years).

DEFINITIONS

5. Monitoring Record: A monitoring record is a document where clinical health variables are recorded. The document can be either a paper or digital record.

6. Monitoring: There are two types of monitoring: experimental and routine daily monitoring.

    a) Experimental monitoring: Monitoring of animals that have been assigned to an experimental protocol and are undergoing experimental manipulations (including but not limited to surgeries, injections, blood collection, etc.).

    b) Routine Daily Monitoring: Monitoring animals for common species-specific health conditions (e.g. fin erosion in fish) or husbandry-related health issues.

POLICY STATEMENTS

7. All animals must be observed daily as per VIU ACC requirements.

8. All required experimental monitoring and procedures and treatments performed on individual animals must be clearly documented in monitoring records.

9. These records must be readily available to the facility staff, University Veterinarian, the ACC, and the CCAC, if requested.

RESPONSIBILITIES

Principal Investigator

10. It is the ultimate responsibility of the principal investigator (PI) to ensure that monitoring is performed as approved in each AUP. This includes using the monitoring records as approved in each AUP.

11. It is the ultimate responsibility of the PI to ensure that all study team members monitoring animals are:

    a) listed in the applicable approved AUP(s);
    b) appropriately trained and aware of their responsibilities; and,
    c) that all people directly working with or caring for research animals (members of the research team) have a basic understanding of the research and the procedures that the animals are undergoing including the monitoring procedures.

12. The PI can delegate experimental monitoring to study team members or facility personnel.

13. If facility personnel have been delegated to perform experimental monitoring and/or fill out monitoring records on behalf of the study team, then this must be arranged by the PI or designate with facility managers to ensure full understanding of responsibilities.

Facility Personnel

14. Facility personnel (including Technicians) are responsible for routine daily monitoring. In some rare cases, the PI can choose to carry out routine monitoring for experimental reasons.

15. If animals have a normal phenotype and are not undergoing experimental manipulation, then routine facility monitoring may be sufficient during that period.

MONITORING REQUIREMENTS

Duration and Frequency

16. It is a guideline of the CCAC and a requirement of the VIU ACC that all animals will be observed on a daily basis as a minimum standard.

17. Once an animal is at risk of deterioration of health or welfare, then more frequent monitoring is required.

18. Animals must be monitored if continued risk of unexpected complications arise and until risk of deterioration of health or welfare is minimized and must be extended if unexpected complications arise.

19. The frequency and duration of monitoring must be determined for each study and clearly stated in the associated AUP. Monitoring frequency and duration will depend on a variety of factors such as severity of clinical signs, potential for deterioration, the expected time course of the experiment, and unexpected complications.

Health and Welfare Assessment

20. Adequate monitoring requires regular assessment of general health and welfare. For fish, refer to the *CCAC Guidelines on: The Care and Use of Fish in Research, Teaching and Testing*.

21. Health and welfare assessment applies not only to monitoring animals for signs of pain, suffering and distress associated with procedures, but also to the routine assessment of all animals to check for any health or welfare problems.

    a) Signs of health and welfare include behaviours, appearance, body functions, environment, and procedure-specific signs. These will include a mixture of subjective and objective measures.

b) The health and welfare signs to be recorded will vary between studies. At a minimum, these should include overall health and study-specific concerns.

22. Health and welfare assessment involves several steps:

- Defining suitable signs for species and procedures.
- Observation of animal to assess identified signs.
- Classification of severity (grading).
- Plan of action (e.g. euthanasia, treatment, monitoring).
- Record keeping.

23. The health and welfare signs that will be assessed must be clearly described in the protocol and include a discrete range in severity for each sign ("scoring" or "grading" system), where possible. This will ensure that all people caring for animals can consistently assess animal health and welfare and that the severity of the condition is documented. Assigning a score to each sign described is commonly used to facilitate record keeping and endpoint determination.

24. Experimental monitoring must include assessment for all expected and potential signs associated with experimental treatments / manipulations. These signs must be clearly outlined in the AUP and monitoring records must be designed accordingly.

Other Monitoring Requirements

25. Additional monitoring requirements and records include, but are not limited to:

- Number of animals and density.
- Food, feeding and nutrition regimes.
- Environmental parameters (e.g. air or water quality).

MONITORING RECORDS

26. Records must be appended to and used as outlined in the approved AUP.

27. A monitoring record should be viewed as a "living document." Its effectiveness and relevance should be reviewed annually.

28. The use and effectiveness of monitoring records will be reviewed during Post-Approval Monitoring (PAM) activities, which include PAM Audits, veterinarian visits, Facility Manager reports, ACC site visits, and AUP renewals.

29. Changes made to monitoring sheets must be incorporated into approved AUPs by submitting an amendment.

Minimal Requirements for Monitoring Records

30. Records must include the AUP number, PI, primary and emergency contact names, contact details.

31. All experimental procedures, supportive care, and treatments must be recorded with the date performed. Administration of all compounds (including anesthetic drugs) must be documented with volume and route of administration.

32. Animals that have undergone any experimental procedures or manipulations (including surgeries, injections, etc.) should be identifiable individually or as a group. This ensures that caretakers are aware that additional monitoring may be required. At a minimum, the name of the procedure and date must be recorded on the monitoring record.

33. The health and welfare signs used to assess the animals and recorded in the monitoring record must be sufficient to document the general health of the animals and the experiment-specific clinical signs that might be expected.

34. The humane endpoint criteria must be clearly written on the monitoring record.

35. Date of death, euthanasia or experimental endpoint must be recorded on the monitoring record along with the type of termination.

36. The CCAC requires that all records be kept for one (1) year past termination of the animal, but these records can be archived outside of the animal facility.