UBC ANIMAL CARE COMMITTEE
POLICY 004

Animal Health and Welfare Concerns: Treatment and Humane Endpoints

Version Approved: May 2, 2016

1. PURPOSE:

The purpose of this policy is to ensure that: 1) the health and welfare of animals are not negatively impacted beyond what is approved in the animal use protocol, 2) unexpected and experimentally related negative impacts on animal health and welfare are investigated, 3) proper records are kept for animals that die or that have reduced health and welfare, and 4) to establish a standardized and appropriate approach to handling animals with reduced health and welfare at all sites under the authority of the University of British Columbia's Animal Care and Use Program.

2. SCOPE:

This policy applies to all animals used in teaching, testing, breeding and/or research housed in University of British Columbia animal facilities, as well as those facilities that reside at affiliated research institutes, centres and hospitals and that fall under the review of University of British Columbia's Animal Care Committee ("UBC animal facilities").

3. DEFINITIONS:

Animal Use Protocol: All proposed use of animals for research, teaching, breeding and testing is documented in an Animal Use Protocol (AUP). This AUP receives ethical review, and approval by the Animal Care Committee, before the animals are obtained and the work initiated.

UBC Clinical Veterinarian: Clinical veterinarian recognized by the UBC Animal Care Committee.

Health and Welfare: Although the term "animal welfare" can capture concerns related to health, we separate "health" and "welfare" for clarity. Health refers to biological functioning, in the sense of absence of disease or injury, and normal growth and development. Welfare refers to behaviour (performance of normal species-specific behaviours) and emotional states (lack of negative emotional sates such as fear, and pain[1].

Morbidity: Diseased state, disability, or poor health due to any cause.

Spontaneous Non-Experimentally Related Conditions: Conditions may arise in animals during the conduct of research that are unexpected and unrelated to the research being conducted

but negatively affect animal health and welfare. For example, occasional mortality or specific disease conditions such as spontaneous tumors can occur in breeding colonies or other "normal" animals.

Unexpected Experimentally Related Conditions: Any effect of an experimental or teaching procedure which is not described in the protocol or anticipated during the planning of the research that negatively affects animal health and welfare. These typically include a series of events rather than a single event. Examples include: higher than expected morbidity or mortality rates resulting from complications such as recurrent post-surgical infections in multiple animals; increased numbers of animals unexpectedly reaching humane endpoint prior to experimental endpoint; unexpected change in time course and/or progression of adverse effects; stereotypical behavior that interferes with normal functioning.

4. POLICY STATEMENTS:

1. As per the Canadian Council on Animal Care (CCAC) guidelines, experiments must be designed to ensure that animals are not "subjected to unnecessary pain or distress".

2. All animals that have poor health or welfare (both spontaneous non-experimentally related and unexpected experimentally related conditions) must receive standard medical or other accepted treatment or be euthanized. These animals must undergo a treatment regime commensurate with their condition. If standard veterinary treatment would affect the experimental results, the animals will be euthanized unless withholding treatment for the condition(s) is specifically approved on the Animal Use Protocol.

3. UBC clinical veterinarians are ultimately responsible for conducting diagnoses and determining appropriate treatments, control measures and/or euthanasia for clinical cases.

4. UBC clinical veterinarians will discuss any animal health or welfare concerns with the Principal Investigator to determine the most appropriate course of action. Principal investigators and their staff must comply with the veterinarian's recommendations for treatment or euthanasia. Veterinarians must do their best to accommodate the goals of the science.

5. A UBC clinical veterinarian must be available to respond to concerns about animal health or welfare at any time.

6. Animals that have reached their humane endpoint, as outlined by the approved Animal Use Protocol, must be euthanized. Only an UBC clinical veterinarian can approve exceptions.

7. The UBC clinical veterinarian must resolve any health and animal welfare concerns that cannot be readily resolved through collaborative interactions between the Principal Investigator, research team member and/or a Facility Manager. The conflict must be

resolved in a time frame appropriate to the severity of the impact on the animal and/or the risk of deterioration of an animal's welfare.

8. If the Principal Investigator or research team member cannot be reached in the case of a pressing health and welfare problem, a UBC clinical veterinarian has the authority to euthanize any animal and where deemed necessary institute measures to protect the health and welfare of that and other animals. Exceptions to this are when the Principal Investigator has pre-arranged authorization for facility staff or managers to euthanize animals at humane endpoint.

9. Individuals responsible for daily animal health observations must have the necessary ability, knowledge and skill to assess the health and welfare of animals under their care.

10. All unexpected experimentally related conditions (see definition) must be reported to the UBC clinical veterinarian designated for that facility. Individuals charged with monitoring the animals, whether facility or research staff, are responsible for reporting.

11. The facility manager must keep a record of all animals found dead or euthanized at humane endpoint (monthly facility "mortality logs"), whether reported by facility staff or researchers. The intent is to detect rates of unexpected deaths above normal and flag them for further investigation. The logs must be submitted to the Post Approval Monitoring Team (PAM) and UBC clinical veterinarian monthly.

12. All unexpected experimentally related conditions must be investigated in order to understand the underlying cause/s. Investigation of unexpected deaths can include discussion with an UBC clinical veterinarian, post-mortem analysis, histopathology etc.

13. Sick animal identification, diagnosis, treatments must be documented as per the ACC Policy 017 on Monitoring and Medical Records of Animals used for Research, Teaching and Testing. Date of death or euthanasia and type of termination (found dead or euthanized) must be recorded and this information must be visible at cage/room level.

14. Each facility must have an SOP on how animal health and welfare concerns are reported to the designated lab contacts and the required response time.

15. All unexpected experimentally related conditions and associated interventions or treatments must be disclosed within the progress report of the Animal Use Protocol at annual and full protocol renewal.

16. If the health and welfare of an animal is affected and non-compliance (see Policy xx) is suspected, then the PAM veterinarian must be notified. See flow chart (Policy xx) for details of reporting.

5. RESPONSIBILITY:

1. It is the responsibility of any person involved in the care and use of animals to follow this policy.

2. It is the responsibility of Principal Investigators to adhere to the humane and experimental endpoints in his/her approved Animal Use Protocol.

3. It is the responsibility of the Principal Investigator to provide current 24-hour contact information for staff in his/her lab who will receive and respond to notifications about animals whose health and welfare is declining or who are found dead.

6. PROCEDURES:

Animals found dead or with reduced health and welfare:

1. For dead animals, remove the dead animal and place the animal in a labeled bag and in a refrigerator until the investigator can be notified. If investigators have provided alternative instructions to the facility staff, then follow those instructions.

2. For dead and euthanized animals, record the identification, date of death and type of termination (found dead or euthanized) at cage level.

3. For animals with reduced health and welfare, alert the Principal Investigator or lab contact(s) and facility manager in a time frame appropriate to the severity of the condition of the animal and/or the risk of deterioration of an animal's health and welfare.

4. In the event that the Principal Investigator or lab contact cannot be reached, then facility staff should contact an UBC clinical veterinarian who will recommend appropriate treatments, control measures and/or euthanasia. Common conditions can be diagnosed and treated according to accepted UBC veterinary guidance documents.

5. All other animals under similar experimental treatments/manipulations must be closely monitored for signs of reduced health and welfare.

6. If an animal is at humane endpoint, then the animal must be euthanized (see policy statement 6 and 8). If there is uncertainty or disagreement, contact the UBC clinical veterinarian (See policy statement 7).

7. Once the Principal Investigator or lab contact has been notified about an animal with reduced health and welfare, there are time limits for their response. These time limits will reflect the severity of sickness of the animal.

    As an example, for rodents, the "UBC Facilities: Grading System and Response Guide for Rodents", recommends the following response times:

    Grade 5: Euthanize within 15 minutes

    Grade 4: 2-hour response required

Grade 3: Response required by the end of the workday.

8. The Principal Investigator or designate should communicate with facility staff to arrange for the collection of any experimentally required samples (blood or tissue) or storage conditions of the body in the event that an animal is found dead or moribund. This allows the technical staff to procure samples and euthanize animals in a quick and humane fashion without delay.

7. REFERENCES:

1. Fraser, D. 2008. Understanding animal welfare: the science in its cultural context. Wiley-Blackwell. UK.

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April -- 2016		CS/ Oct 13-2015	Yes	Entirely new document.
April 2016		CS / April 19, 2015	Yes	Edits from ACC members, changed title, redefined terms