

UBC ANIMAL CARE COMMITTEE

Guideline on Animal Welfare

Date Approved: November 18, 2022

1.0 PURPOSE

This Guideline outlines the steps for Animal Facility personnel and Study Team members to follow when responding, reporting and documenting on animals experiencing compromised welfare (morbidity) or mortality.

2.0 DEFINITIONS

Animal: could mean one single animal or a group of animals (e.g. fish) that cannot be assessed at an individual level.

Expected morbidity/mortality: Any morbidity/mortality risks described in an animal use protocol (AUP). Examples include: those potentially expected as a result of an experimental procedure (e.g. surgery), due to the phenotype/genotype of the animal, or those that reach scientific/experimental endpoint.

Unexpected Morbidity: All conditions that are either 1) non-experimentally related, AND/OR 2) not described in the AUP, AND/OR 3) cause increased morbidity beyond that described in the AUP. Examples include: spontaneous conditions unrelated to the experiment (tumour development, conjunctivitis, dermatitis, stereotypic behaviours); complications due to experimental procedures (e.g. recurrent post-surgical infections); unexpected change in progression of adverse effects.

Unexpected Mortality: All unexpected animal deaths including those euthanized at humane endpoint/humane intervention point (HE/HIP), those that died during procedures (DDP), or those found dead (FD). Examples include: higher than expected mortality rates from experimental complications (e.g. increased numbers of animals unexpectedly reaching humane endpoint prior to experimental endpoints), sudden death.

3.0 PROCEDURE

*Refer to Appendix 1 for a flow chart summarizing the procedures outlined in this document

Determine if the morbidity or mortality of the animal(s) is expected or unexpected by referring to the Animal Use Protocol (AUP), monitoring sheets, cage cards, and/or experimental summary sheets. See definitions section.

3.1 Expected Morbidity or Mortality:

3.1.1 Response:

Respond according to your AUP

3.1.2 Reporting:

Reporting is not required for **expected** morbidity or mortality

3.2 Unexpected Morbidity:

3.2.1 Response:

- 3.2.1.1 Assess the animals' condition (e.g. assign a clinical health score/grade);
- 3.2.1.2 The severity of the animal's condition and/or risk of deterioration of the animal's welfare determines the required notification and response time by which decisions about care or euthanasia must be made;
- 3.2.1.3 For animals requiring additional care beyond what is described in the approved AUP, the UBC Clinical Veterinarian must be involved in recommending appropriate treatments, control measures, additional monitoring and/or euthanasia;
- 3.2.1.4 Provide treatment based on the assessment made and/or the UBC Clinical Veterinarian's instructions;
- 3.2.1.5 Common conditions can be diagnosed and treated according to accepted UBC veterinary guidance documents (e.g. UBC Facilities Guide to Immediate Care and First Aid of Rodents);
- 3.2.1.6 Study Team member(s) should pre-arrange with Animal Facility personnel if they may be asked to collect experimentally required samples (blood or tissue) or provide storage conditions for animals euthanized at humane endpoint. This will allow Animal Facility personnel to euthanize animals and procure samples without delay.

3.2.2 Reporting:

All incidences of **unexpected** animal morbidity must be reported as described below.

- 3.2.2.1 **All personnel:** The UBC Clinical Veterinarian must be contacted without delay for any morbidities that are new and/or unexpected, or that raise concern for the welfare of that or other animals. The following are some examples but this is not an exhaustive list:
 - any unexpected morbidities, or increased rates of morbidities
 - when indicated to do so on the approved AUP
 - animals with moderate to severe conditions
 - animals requiring additional monitoring
 - animals showing signs of deteriorating health
 - uncommon conditions;
- 3.2.2.2 **Animal Facility personnel:** report to the Facility Manager and Study Team member(s). If the Principal Investigator or research team members cannot be reached, then contact a UBC Clinical Veterinarian for recommendations;

3.2.2.3 **Study Team members:** report to Facility Manager or their delegate;

3.2.2.4 **Alternate housing facilities:** report all incidences to the Principal Investigator (PI) or their delegate.

3.3 Unexpected Mortality:

3.3.1 Response:

3.3.1.1 Follow facility SOP for processing carcass;

3.3.1.2 **Animal Facility personnel:** If Study Team members have provided alternative instructions, then follow those instructions;

3.3.1.3 **If no facility SOP is available:**

- Place the deceased animal in a labeled plastic bag (AUP #, animal identification, date of death).
- Place carcass in the refrigerator until determined with the research team and/or veterinarian if any follow-up is required. If known the carcass is not required, place in freezer for disposal.

3.3.2 Reporting:

All incidents of **unexpected** animal mortality must be reported as described below.

3.3.2.1 **All personnel:** report to a UBC Clinical Veterinarian without delay so they can investigate the underlying cause;

3.3.2.2 **Animal Facility personnel:** report to the Facility Manager and Study Team member(s);

3.3.2.3 **Study Team member(s):** report to Facility Manager or delegate;

3.3.2.4 **Alternative housing facilities:** report all incidences to the PI or delegate.

4 DOCUMENTATION:

4.1 When reporting unexpected animal morbidity or mortality, provide the following information. This information must also be summarized on a monthly morbidity and mortality (MM) log or in Mosaic.

General information

- Date initiated/discovered
- Date resolved
- PI name
- Protocol #
- Room #
- Cage/Pen/Tank #
- # of animals impacted
- Total number of animals on site in the current study (e.g. cohort, experimental group)

Animal information

- Animal identification
- Species/strain
- Sex (if known)
- Date of birth/arrival
- Animal type (stock, experimental, breeder)
- Genotype (if applicable)
- Any relevant procedures/history

Morbidity information for sick animals:

- Clinical description of morbidity or Animal Health Score – (e.g. Grade, where applicable)
- Treatment plan
- Resolution

Mortality information for dead animals, specify if:

- Found Dead (FD)
- Euthanized at Humane endpoint (HE)
- Died during procedure (DDP)

4.2 MM log: Facility Managers, and the supervisor or PI (for alternate housing sites), will submit a morbidity and mortality log (MM log) **monthly** to the PAM team (pam.team@ubc.ca) and the UBC Clinical Veterinarian for the facility.

4.3 For health or compliance concerns, your UBC Clinical Veterinarian or PAM team member, respectively, will respond for follow-up.

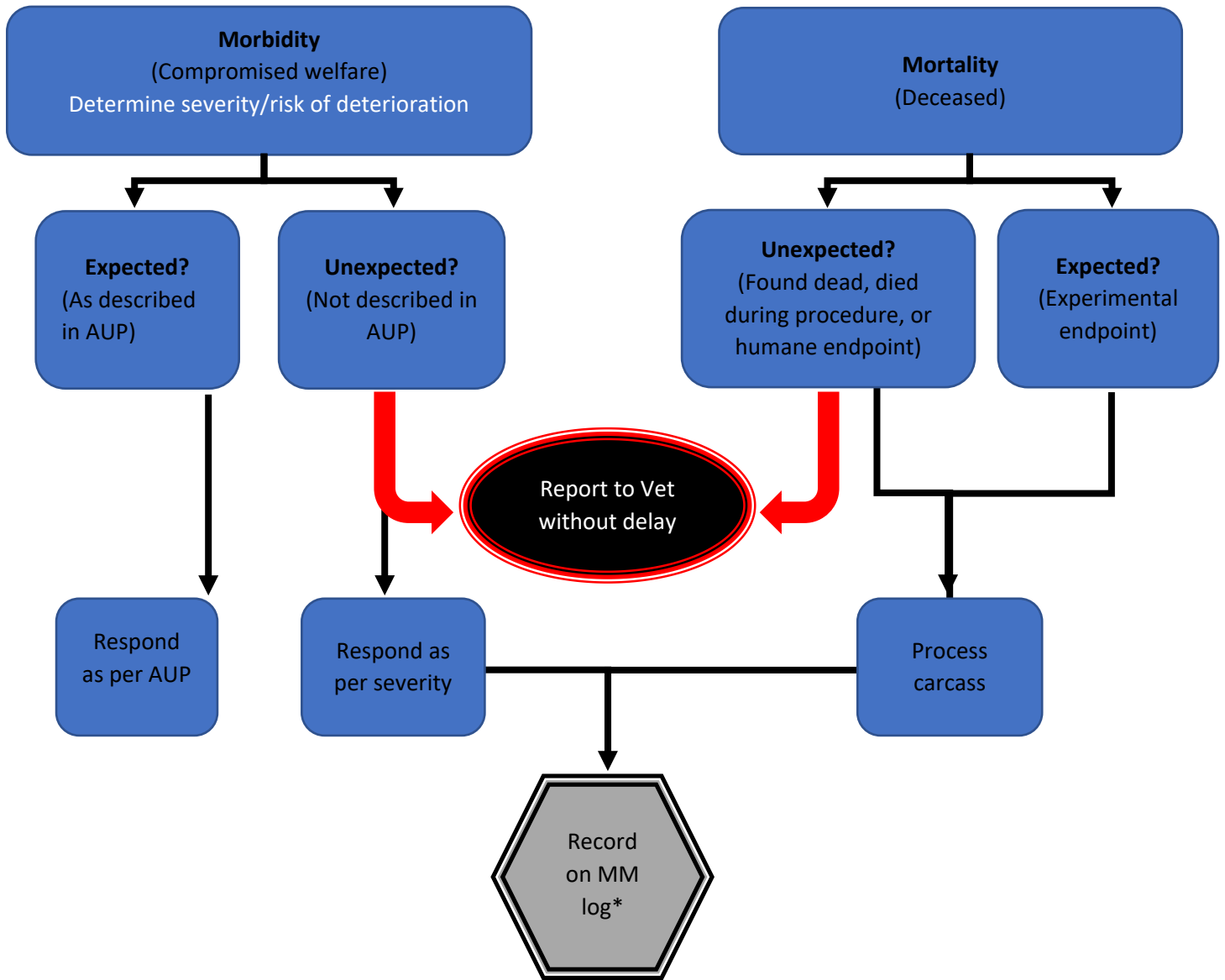
5 REFERENCES:

5.2 UBC ACC Policy 004: Animal Welfare

5.3 UBC ACC Policy 017: Monitoring and Medical Records of Animals used for Research, Teaching and Testing

5.4 CCAC Guidelines (link)

Appendix 1



* For Mosaic facilities, this information is captured directly, no additional log is necessary.