

## CULATR Policy- Unexpected Adverse Event Assessment and Reporting Plan

### Policy Summary

Whenever there is an unexpected occurrence involving animal research, there is an expectation that:

1. Animal welfare is firstly protected, and CCMR Staff/Veterinarians notified.
2. A formal notification of the event is submitted by the Principal Investigator (or delegate).
3. An assessment of the incident is conducted, and research activities cease if it is identified to be a cause of further potential animal welfare concerns.
4. The incident is reviewed by the Attending Veterinarian/CULATR, and classified as Minor, Moderate or Significant for further reporting to CULATR or AAALAC International as needed.

### Overview

As per AAALAC [FAQ](#),

Unexpected adverse events (UAE) can occur at any time in an animal care and use program. Such events may vary in seriousness and they may exceed the threshold for a well-managed program. Reporting significant adverse events fosters protection of the integrity and creditability of the institution and demonstrates a culture of care. Institutions are encouraged to evaluate whether the single incidents over time collectively indicate a more significant concern. Activating the adverse event assessment and reporting plan ensures that appropriate steps have been taken to determine whether the event/concern indicates changes are necessary to minimize further risks, if a single incident may or may not be an indicator of a larger issue, and ensures that appropriate actions have been taken and that key program personnel and oversight bodies are fully informed.

The following are examples of UAE's

- Protocol violations which *had the potential* to compromise animal welfare
- Animal use not approved by CULATR
- Inadequate veterinary care
- Conditions that resulted in unexpected animal harm or deaths e.g.
  - Accidents or errors
  - Morbidity or death of an animal, or group of animals that are unexpected.
  - Adverse effects following a procedure that were not expected.
  - Adverse effects in a larger number of animals than predicted during the planning and approval of the project, based on the number of animals actually used, not the number approved for use.
  - A greater level of pain or distress than was predicted and approved.
  - Inappropriate euthanasia techniques and/or failure to confirm euthanasia
- Equipment failure or Natural disaster
  - Power failures, inclement weather, emergency situations or other factors external to the project that may have a negative impact on the welfare of the animals.
- Significant animal rights activities (e.g., protests, break-ins, property damage, public records requests that include AAALAC International documents)
- Substantiated complaints or reports regarding animal welfare concerns
- Internal or external reviews/inspections or other similar reports that document significant adverse events or noncompliance that resulted in animal harm or death; investigations by national oversight bodies; and other serious incidents or concerns that negatively impact animal well-being

(e.g., failure to follow the approved protocol which resulted in compromised animal welfare; death during transport)

- Significant human health issue directly related to the animal care and use program

The following are examples of events that would NOT be considered UAE's

- Isolated incidences of known potential complications that can arise despite the procedure performed by a competent person in a responsible manner such as oesophageal perforation following oral gavage, or wound dehiscence following suture of wound.
- Disease outbreaks within research colonies identified during surveillance that do not impact on animal welfare or cause widespread death or morbidity but are culled due to biosecurity concerns.

## **Action**

The following steps must be taken in the event of an UAE:

### *Investigators*

1. The needs of any injured, ill or distressed animals must be attended to without delay. In many cases, the most appropriate action to relieve suffering will be humane culling. Investigators are permitted to humanely euthanise animals using a method in accordance with their CULATR protocol, if they believe to be suffering without prior discussion with the CCMR Veterinarian.
2. The investigator / facility manager must report the event to a CCMR Veterinarian or CCMR staff as soon as possible after the immediate needs of the animals has been attended to. If urgent advice or approval to take other mitigating action is required e.g. pain relief, this contact should be made by the emergency telephone. Tel: 6499 5215 and by emailing [vets@hku.hk](mailto:vets@hku.hk)
3. Investigators must comply with any instructions or advice given by a CCMR Veterinarian or CULATR Chair or delegate.
4. The risk to the wellbeing of all other animals must be assessed and immediate action taken, as required, to mitigate any risk.
5. An investigation into the cause or factors contributing to the adverse event must be conducted as soon as possible by the Attending Veterinarian/ CULATR in conjunction with the research team.
6. If project activities are identified or suspected as the source of risk to animal wellbeing, they must be ceased immediately and not restarted until permission has been granted by CULATR or the CCMR veterinarian
7. Other members of the research team and, where applicable, the CCMR/Satellite facility manager, must be informed of the event and any instructions or advice given by the CCMR Veterinarian or CULATR Chair (or delegate).
8. Wherever practical, a necropsy should be performed on any dead animals or animals which required culling. In the event of multiple deaths, a suitable sample of carcasses (no less than 10% of the total) should be selected for necropsy. If necropsy examination is inconclusive, appropriate samples should be submitted to a suitable laboratory for further investigation whenever possible.
9. Necropsy can be performed by a CCMR Veterinarian, or by other competent persons or external laboratories.

10. If immediate necropsy is not possible, the carcasses should be refrigerated (not frozen) and necropsy performed within 48 hours of death.
11. An Unexpected Adverse Event Report form should be completed online by the Principal Investigator (or delegate) promptly (e.g. within 48 hours) of the event. <https://ccmr.hku.hk/en/Contact-Us/Unexpected-Adverse-Event>
12. The Unexpected Adverse Event Report form must include the following information:
  - A brief summary of the methodology of the approved project including the total number of animals approved.
  - Brief details of any previous unexpected adverse events in the project.
  - A concise history or description of events including location, date, time of event and a summary of initial actions taken.
  - Numbers of animals affected by the unexpected adverse event and details of the welfare impact (mortality and morbidity).
  - Details of personnel present and/or involved.
  - Identification of known or likely causal factors. Necropsy or pathology results.
  - Proposed changes or actions to prevent a recurrence.

#### *CULATR & Veterinary Team*

1. The CCMR Attending Veterinarian (or delegate) will be the point of contact for reporting of Unexpected Adverse Events.
2. Unexpected Adverse Event report forms will be considered by the CCMR Attending Veterinarian & CCMR Director before being forwarded to the CULATR Chair.
3. Completed Unexpected Adverse Event Report forms will be included in the agenda for the next CULATR meeting, or via electronic circulation and reviewed by CULATR members/designated members to identify the causal and contributing factors (e.g. disease, equipment failure, unsuitable housing conditions or husbandry, experimental procedures, external factors such as adverse weather, negligence, misconduct).
4. The CULATR will decide on an appropriate course of action, for example:
  - Changes to experimental protocol.
  - Suspension of the project, or part of project, or members of the project.
  - Withdrawal of project approval.
  - Directions for further training or monitoring of the project by a CCMR Attending Veterinarian.
  - Inspection of a facility.
  - Improvements in facilities, staffing or equipment.
  - Classification of the UAE and reporting the matter to AAALAC
5. When determining whether project activities should be altered, suspended or ceased, the CULATR and CCMR Attending Veterinarian will consider both animal wellbeing and the potential waste of animal lives resulting from premature termination of a project or part of a project.
6. All UAEs must be recorded in the project file and reported by the Principal investigator (or delegate) in the Annual Report submitted via CARES.
7. The adverse event assessment and reporting plan should be available for review by the AAALAC site visit team, and updated or modified as necessary.

## **Reporting Plan**

An UAE report, depending on severity, must be submitted promptly or via annual report to AAALAC International. CULATR Chair together with the CCMR Attending Veterinarian and CCMR Director will first evaluate the severity of any UAEs and classify as either Significant, Moderate or Minor UAE.

### *Significant UAE*

Any UAE that results in significant unexpected harms to the animals as a result of e.g.: misconduct or negligence that resulted in unrelieved pain, distress or death; an act contradictory to local legislation; an incident that may have an institutional or reputational impact to HKU.

1. AAALAC International must be informed “promptly” and shall first be notified via telephone followed by a formal written report once CULATR investigations are complete.
2. CULATR must investigate the UAE and instigate corrective actions.

### *Moderate UAE*

Any UAE that results in moderate harms to the animals. e.g. moderate level of pain or distress as a result of misconduct or negligence, or unintended or accidental pain or distress/death due to mechanical failure/natural disaster or unexpected experimental outcome:

1. CULATR must investigate the UAE and instigate corrective actions.
2. AAALAC International must be informed “promptly” via a formal written report once CULATR investigations are complete.

### *Minor UAE*

Any UAE that results in minor harms to the animals. e.g. mild level of pain or distress as a result of misconduct or negligence, or unintended or accidental moderate or mild pain and distress due to mechanical failure/natural disaster or unexpected experimental outcome.

1. CULATR must investigate the UAE and instigate corrective actions.
2. AAALAC International must be informed via annual report once CULATR investigations are complete.

## **References**

Adapted from:

1. AAALAC International FAQ Managing and reporting adverse events.  
<https://www.aaalac.org/accreditation-program/faqs/#H2>
2. University of Tasmania. Guidance for the management of Unexpected Adverse Events.