Animal Research Review Panel Guideline 29

Daily checking of research animals

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1 September 2022

1. Daily checking of research animals

The Australian Code for the care and use of animals for scientific purposes requires that animals be monitored with sufficient frequency to ensure any harm, including pain and distress, is promptly detected and managed (clauses 2.5.5 (ii), 3.1.20 (ii)).

The methods and frequency of monitoring must be detailed in project applications to the Animal Ethics Committee (AEC) and approved by the AEC (*Australian Code* clause 2.7.4 (xv)).

The Animal Research Review Panel considers a minimum requirement for frequency of monitoring is that animals are checked at least daily, including on weekends. This applies to both laboratory animal situations and animals held in paddocks under commercial conditions.

1.1. Monitoring Methods

The appropriate methods used to monitor animals will vary with the species and type of research. For example, in a low impact field trial using sheep, daily observation of sheep in the paddock from a distance may be sufficient, to ensure animals have food and water and are behaving normally (in between more detailed observations and measurements relevant to the project). Similarly, where handling and disturbance of animals may have adverse impacts on welfare (such as for mice with litters), daily viewing of animals in their home cage may be sufficient (in between more detailed observations and measurements relevant to the project).

Examples of unexpected adverse events that have occurred as a result of animals in research projects not being checked at least daily include:

- Sheep found dead in their paddock from lack of water after the water supply was accidentally turned off.
- Sheep found dead in their paddock with suspected algae intoxication from drinking dam water.
- Mice with ulcerated skin tumours where boxes were only checked daily for food and water levels, but mice were not viewed.

Conditions and recommendations have been placed on accredited establishments requiring a minimum of daily observations (Australian Code 2.5.5 (ii), 2.5.15 (viii), 3.1.20 and 3.1.21) including on weekends (Australian Code 2.4.18, 2.4.20).

2. Australian Code for the care and use of animals for scientific purposes

Clauses of the Australian Code of particular relevance to monitoring of animals include:

Promote compliance

- 2.1.5 Institutions must promote compliance with the Code by:
- (ii) providing adequate resources to ensure that the AEC and people involved in the care and use of animals can meet their responsibilities, including monitoring animals and managing adverse impacts on their wellbeing
- (v) ensuring that guidelines for animal care and use are developed in consultation with the AEC, approved by the AEC, and implemented and promoted within the institution. Guidelines must include:
- (c) monitoring and assessment of animals to ensure that any harm, including pain and distress, is promptly detected and managed

Identify clear lines of responsibility, communication and accountability

- 2.1.7 Institutions must identify clear lines of responsibility, communication and accountability by:
- (i) ensuring that a person is responsible for the wellbeing of animals at any given time and is clearly identified so that:
- (a) animal wellbeing is monitored by competent people at all stages and sites of animal care and use. The scope of day-to-day monitoring must be clearly outlined and communicated to all parties

Avoid or minimise harm, including pain and distress

- 2.4.18 Investigators must take steps at all times to safeguard the wellbeing of animals by avoiding or minimising known or potential causes of harm, including pain and distress, to the animals. Steps include:
- (vi) ensuring that animals are monitored and assessed at all stages of the project for signs of pain and distress, including deviations from normal behaviour (see Clauses 3.1.20–3.1.21). Such monitoring and assessment must be conducted at a frequency sufficient to detect such signs at an early stage, as determined by the procedure, and ensure that the planned endpoints are detected
- (vii) maintaining records of monitoring and assessment of animal wellbeing (see Clauses 2.4.30–2.4.33 and 3.1.22)
- (viii) taking prompt action based on the monitoring and assessment of animal wellbeing, in accordance with intervention points and humane endpoints approved by the AEC (see Clause 3.1.23)

Accept responsibilities

2.4.20 Investigators must:

(ii) ensure that the scope of monitoring the wellbeing of the animals at all stages of their care and use in the project is clearly outlined and communicated to all parties. Depending on the type of project, this may include monitoring by animal carers.

Maintaining records

2.4.31 Investigators must ensure that records of monitoring and assessment of animals are in accordance with Clauses 3.1.21-3.1.22.

Avoid or minimise harm, including pain and distress, to animals

2.5.5 Animal carers must:

- (ii) monitor and assess the wellbeing of animals for which they are responsible (see Clause 2.5.1) with sufficient frequency to ensure that harm, including pain and distress, is promptly detected and managed (see Clauses 3.1.20–3.1.21). Where animal carers are involved in the monitoring and assessment of animals after they have been supplied to an approved project, the investigator must ensure that the scope and responsibilities for day-to-day monitoring are clearly outlined and communicated to all parties
- (iii) maintain records of monitoring and assessment of animal wellbeing (see Clause 3.1.22)
- (iv) take prompt actions based on the monitoring and assessment of animal wellbeing and in response to unexpected adverse events and emergencies, in accordance with institutional policies and procedures, and procedures approved by the AEC (see Clauses 2.1.5 and 3.1.23–3.1.25), including liaising with investigators and seeking veterinary advice.

People managing and supervising breeding and holding facilities

2.5.15 The facility manager, with support as required from the institution and other staff members, and advice from veterinarians, must:

(viii) ensure that the wellbeing of animals for which they are responsible is monitored on a day-to-day basis by a competent person, and that appropriate actions are taken in accordance with both institutional and AEC policies and procedures, and actions documented in animal care procedures approved by the AEC (see Clauses 3.1.20–3.1.25)

Take steps to avoid or minimise adverse impacts on animal wellbeing Support the animals' wellbeing

3.1.7 The living conditions in indoor facilities in which animals are bred, held and used must be checked daily (see Clause 3.2.17).

Monitor animals and take appropriate action

- 3.1.20 Animals must be monitored and assessed:
- (i) by a competent person who is knowledgeable about the normal behaviour and signs of pain and distress for the species, or a person under the direct supervision of a competent person
- (ii) with sufficient frequency to ensure that any harm, including pain and distress, is promptly detected and managed in accordance with the AEC approval for the project or activity.
- 3.1.21 Methods for monitoring and assessment of animal wellbeing should include:
- (i) the criteria that will be used to assess wellbeing
- (ii) the level and frequency of monitoring to ensure that any changes in an animal's condition are detected early
- (iii) the criteria that will be used to determine when action is required
- (iv) actions that will be taken so that adverse impacts on animal wellbeing, including predicted effects and unforeseen complications, are addressed rapidly and effectively
- (v) the methods for recording observations, treatments and actions
- (vi) flexibility to ensure a rapid and effective response to changes during the course of the project or activity.
- 3.1.22 Records of the monitoring and assessment of animal wellbeing must be:
- (i) sufficient to enable the AEC to verify that the wellbeing of animals has been monitored as agreed, and allow review and critical investigation of the cause(s) of and responses to unexpected adverse events as a basis for future prevention strategies
- (ii) accessible to all people involved in the care of the animal
- (iii) available for audit by the institution, the AEC and authorised external reviewers.
- 3.1.23 Prompt action must be taken based on the monitoring and assessment of animals, in accordance with:
- (i) institutional and AEC policies and procedures (see Clause 2.1.5)
- (ii) the intervention points and humane endpoints approved by the AEC for a project, or actions documented in procedures for animal care approved by the AEC.

INT22/110598

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