

NHMRC Policy on the care of dogs used for scientific purposes¹

To be used in conjunction with the Australian code of practice for the care and use of animals for scientific purposes.

This policy has been developed by the Animal Welfare Committee (AWC) in response to the Committee's concern about the housing and care of dogs in some research and teaching institutions. This policy aims to improve animal welfare and identify issues for the institutional Animal Ethics Committee (AEC) assessing research projects which use dogs. It provides a general framework to help the AEC develop appropriate standards of care and housing of dogs in institutions. Each AEC has to develop its own written guidelines for the care of dogs (see the 2004 *Australian Code of Practice for the Care and Use of Animals for Scientific Purposes*, section 2.1.1) which will take into account the particular conditions that prevail at that institution (see *Institutional Guidelines* below).

Introduction

The use of companion animals such as dogs for medical and scientific research and teaching is strongly opposed by some members of the general public, and is generally a highly emotive and controversial issue. Research institutions and investigators must therefore achieve high standards of care of dogs in order to meet community expectations.

This policy seeks to ensure that dogs kept confined in animal holding facilities are provided with housing and an environment which meet, at the very least, the requirements of the *Australian Code of Practice for the Care and Use of Animals for Scientific Purposes*.

In particular, this policy aims to ensure that dogs kept in the research environment are provided with a good quality of life. Dogs need interesting and varied surroundings, regular exercise, frequent contact with people and the opportunity to express their natural social needs

¹*Scientific Purposes* is defined as: "All those purposes which aim to acquire, develop or demonstrate knowledge or techniques in any science, including activities for the purposes of teaching, field trials, environmental studies, research, diagnosis, product testing, and the production of biological products."

and instincts by contact with other dogs. This is especially important for animals held for long periods.

Responsibility of the Investigator (*refer to 2004 Code section 3*).

The primary responsibility for the health and well-being of dogs used for experimental purposes lies with the investigator.

Investigators should ensure that they and their staff are competent to handle the animals and to provide a high standard of care. The investigator should also consult specialists (e.g. a veterinarian or those expert in handling dogs in particular experimental circumstances) whenever necessary.

It is also the investigator's responsibility to ensure that the project has been approved by the institutional AEC and that it complies with the *Australian Code of Practice for the Care and Use of Animals for Scientific Purposes* and relevant legislation before commencing the project.

Contact with People

One of the most important factors for AECs to consider is the employment of well-trained, caring and committed staff to care for the dogs.

Dogs are gregarious, social animals and contact with people is crucial for their general well-being. This is especially important for animals used in research. Dogs used for medical research are generally better adapted to their holding conditions if they receive frequent and regular contact with people.

Dogs must have **daily contact** with at least one attendant for a reasonable period of time, even when they are group housed. Feeding, cleaning and routine husbandry should not count as part of this contact. Some dogs will demand more attention than others so the length of time spent with each animal will depend on its need for contact with humans.

Dogs held at the institution for more than seven days should also have regular contact with a member of the research team. If this person

becomes a familiar, friendly source of contact, the dog will be more confident in the experimental situation. The need for contact is especially important for young dogs and for dogs entering the colony for the first time, irrespective of age.

Change of Environment and Time out of the Cage

Dogs held in cages need variation to their environment and an opportunity to explore new surroundings using all of their senses. If dogs remain confined in a restricted and boring environment, they are likely to develop abnormal behaviour (such as continual jumping in the cage, self-mutilation and repetitive behaviour).

When dogs are held for longer than 7 days within the institution, particular attention must be given to providing daily outdoor exercise. Animals should spend several hours in an outside run in contact with or sight of other dogs. Where an outside run is not available, attendants need to provide an opportunity for dogs to leave their normal cage for at least 30 minutes each day. During this period they should be taken outside to run freely or should be taken for a walk on a leash, even in bad weather. Dogs enjoy being outside and experiencing a change of environment. The time dogs spend outside of their cages while cages are cleaned is not sufficient.

Selection of Dogs *(refer to 2004 Code section 4.3)*

a. Suitability of Breed and Temperament

Selection of suitable dogs as experimental animals is critical to the success of the research project.

It is difficult to provide clear guidelines on the breeds which are best suited to medical experimentation, but some generalisations can be made. For instance, dogs requiring considerable exercise would not be suitable for confinement in a laboratory environment. Some breeds such as afghan, saluki and red setters are less likely to adapt readily to the holding conditions. Dogs which are bred for a high level of activity may become restless and bored in the confines of a laboratory. Dogs which have an aggressive nature are also unsuitable.

Dogs should be selected by a veterinarian or person experienced in the selection of dogs for experimental purposes.

b. Health Status

All dogs entering the institutional supply unit must be given a clinical examination by a veterinarian experienced in small animal medicine and receive any appropriate treatment before entering the unit.

Pound Sources

Using dogs which would otherwise be killed in pounds can obviate the need to breed additional dogs for research. However, investigators should be aware of community concern about the use of pound dogs in medical research. One of the major issues is the length of time allowed to claim dogs from local pounds and the concern that family pets may be included inadvertently along with unwanted stray dogs as experimental animals in medical research.

In order to allay community fears:

- a. It is essential that institutions know about local government and State laws relating to the use of pound dogs in medical research and that these laws are followed strictly.
- b. When animals are obtained from a public pound:
 - i. Dogs must be held by the institution for a minimum of **seven days** in addition to any statutory requirements placed on pounds. Isolation should be avoided if possible and conditions which apply in other areas should be duplicated in quarantine.
 - ii. Institutions must maintain full records of every dog obtained from a pound and these records must indicate the identification number given to the dog by the pound. After issue by the institution, the maintenance of adequate records becomes the responsibility of the investigator.
 - iii. Dogs carrying identification given to them by the owner, including microchips, must not be used (except to obtain post mortem material), unless the written consent of the owner has been obtained.

Environmental Conditions (refer to 2004 Code sections 4.4.14, 4.4.15, 4.4.16, 4.4.17 and 4.4.18).

Housing should provide the dogs with a clean, dry environment, within contact or sight of other dogs. Attention must be given to reducing

disturbing noise that may be within a dog's auditory range, such as vibrations. Lighting levels, temperature and humidity levels should all be appropriate for the comfort of dogs. If water is used to hose down enclosed areas, humidity control becomes important and residual water should be removed.

Housing *(refer to 2004 Code section 4.4).*

Areas holding dogs should not be adjacent to areas holding other species which might be stressed by the sight or sound of dogs.

Indoor housing should provide:

- clean water;
- a comfortable place to lie down. Appropriate dry bedding should be provided. Trampoline beds are recommended. Impervious wooden bunks or benches are also acceptable as long as they are easy to keep clean and dry and do not result in any detectable rubbing on the animals' coats;
- enough room to defecate away from the sleeping area;
- opportunity to see and smell other dogs, except that females in oestrus should be housed away from males;
- an appropriate environment which protects the animal from excessive and unpleasant noise;
- toys which can be safely chewed or which contain food treats.

Cages should be cleaned at least once a day. Special attention should be paid to, and special facilities provided for, sick dogs, breeding animals and dogs under 16 weeks of age. For instance, whelping boxes lined with shredded paper should be made available for these animals.

Outside housing should:

- meet local government or State regulations for dog pounds or shelters;
- provide a dry sleeping area;
- provide some shade and shelter from wind and rain, taking into account prevailing weather conditions;
- be well drained; and
- have faeces removed at least daily.

Diet *(refer to 2004 Code sections 4.4.24, 4.4.25, 4.4.26 and 4.4.27).*

Dogs should be given a complete diet and one which is appropriate for the individual animal e.g. puppy, lactating bitch, etc. They should also be provided with a varied diet unless constrained by experimental requirements. If the standard diet is not suitable for the research programme, special dietary arrangements should be made, and approved by the institutional AEC.

Dogs should be weighed on admission to the institution and thereafter they should be weighed weekly. Their initial weight response (drop or rise in weight) should give an indication of how they are responding to the new environment and to the research protocol.

Veterinary Care *(refer to 2004 Code sections 4.5.8, 4.5.9, 4.5.10 and 4.6.1)*

All dogs under experimentation should be examined by a veterinarian at a frequency determined by the AEC. This veterinarian, who may be part of the institution but who must not be associated with the research programme, must maintain health records for each dog inspected and report regularly to the institutional AEC. The institutional AEC should direct additional care to those animals that require it because of their experimental regimen.

The health programme for dogs not undergoing acute surgery or experimentation and kept for longer than 7 to 10 days should include vaccination, treatment and prophylaxis for internal and external parasites and regular bathing and grooming.

Institutional Guidelines *(refer to 2004 Code section 2.1.1).*

Institutions in which dogs are used should develop written guidelines for the care of dogs. These should be developed in conjunction with research and animal care staff, and be approved by the institutional AEC. Specific requirements regarding, for example, cage sizes, should be indicated in these guidelines and should be consistent with the individual State and local government requirements. The chain of responsibility for the animals should be very clearly defined. The ultimate responsibility for dogs in research programmes must lie with the investigator.

Animal Deaths *(refer to 2004 Code section 4.5.4).*

All deaths other than planned euthanasia at the end of the protocol must be the subject of a post mortem by a veterinarian. The AEC must be notified of the death preferably prior to the post mortem examination. Every effort should be made to have the investigator present at the post mortem.

If the death of an animal is unexpected and has resulted from experimental methods or mismanagement, the investigator and animal care staff must take immediate action to prevent further deaths from the same cause.

A report of the likely cause of death and any remedial action taken by the investigator should be forwarded to the AEC promptly.

Euthanasia and Disposal *(refer to 2004 Code sections 3.3.18-3.3.23 and 4.8.1).*

When euthanasia is required it should be induced quickly and painlessly with an intravenous overdose of barbiturate. Dogs' carcasses should be incinerated on site or, if facilities are not available, they should be disposed of appropriately by a reputable waste management company.

The animal supply unit must examine all requests from staff or the general public to adopt dogs as pets and seek appropriate advice (e.g. institutional veterinarian) on the suitability of the applicant.

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