

University of Nebraska – Lincoln

UNL IACP Policy # 11-06-xxxx

General Policy on Basic Care to be Provided for Dogs

General Policy: All dogs will be housed according to space requirements set by the USDA and guidelines in the Guide for the Care and Use of Laboratory Animals. All dogs will be provided with appropriate and adequate feed and water daily unless specified otherwise in an approved protocol.

Applicable: All faculty, staff, and students employees of the University of Nebraska - Lincoln who are caring for and using dogs in research or teaching.

Purpose: To describe the policies in place to ensure that direct routine husbandry and handling for dogs is in compliance with that prescribed by the attending veterinarian and approved by the UNL IACUC. When followed these written policies will ensure that dogs are handled correctly, stress and discomfort are minimized, and safety to both the animals and the persons handling them is maximized.

Specific area policy:

Housing: To calculate minimum space required for each dog, use the following formula: (length of the dog from the tip of the nose, to the base of the tail, in inches + 6) squared, divided by 144 = required floor space in sq. ft.

Feeding: All dogs are to be fed before 10:00 every morning in feeders appropriate for the dogs with individual feeding spaces available for each animal in the primary enclosure. (amount and type determined in concert with the IACP veterinary staff and the investigator). Commercially available complete diets will be used unless the approved protocol has specific requirements for altered food composition. Close observation must be maintained to detect nutritional deficiencies when other than complete commercial diets are used.

Watering: All animals must have access to clean, potable water at all times unless approved experimental procedures dictate otherwise.

Observation: The animal care staff will evaluate every dog daily by performing general observations for animal health. Access to feed, access to water and housing conditions are of critically importance and will receive a high management priority. These required observations will be recorded daily on the "Animal Room Daily Care Sheet" located near the door to the room.

Sanitation: Rooms are hosed down daily. Dog runs are sanitized twice a week with a detergent/disinfectant solution using either a pressure washer or low pressure scrub brush attachment. Feeders and water bowls are sanitized in the cage-washer at least weekly. When a room is emptied of animals and before new animals are brought in, it is completely cleaned, disinfected, including the ceiling, walls, floors and all fixtures, and allowed to stand empty for one week. This week is followed by a second thorough cleaning with detergent /disinfectant and then completely rinsed to remove all chemical residue. Cleaning will be monitored by an acceptable culture method or by biofilm detection to document effectiveness.

Required Environmental Conditions:

Temperature: Biomedical holding of dogs requires holding between 64 and 84°F. Dogs tolerate a fairly wide ambient temperature range. When temperature changes are required adaptation time periods are also required and

involve physiologic changes that if not taken into account can adversely influence research data. Relative humidity for biomedical holding should be maintained between 30 – 70% in an indoor biomedical facility.

Ventilation: Ventilation is important to maintain stability of gaseous and particulate contaminants and to dilute and remove heat and humidity generated by the animals. The ventilation must be well distributed throughout the room to effectively maintain the air quality and to minimize drafts. Ventilation rates of 12 to 15 room air changes per hour are employed for dog rooms to maintain a healthy environment. Recirculation of room air is not advisable without both HEPA filtration to remove particulates and activated charcoal filtration to remove chemical contamination.

Illumination: Although the optimal lighting conditions for dogs are unknown, common practice employs a 12 to 14 hour light to 12 to 10 hour dark cycle. For breeding colonies, the 12:12 hour cycle has been shown to be optimal for dogs. Light should be sufficient to allow daily observation of all dogs within the cages in the room.

Noise: Dogs may be startled by sudden, sharp noises. Personnel should exercise care to wear noise protection devices when working with dogs as their barking presents a significant noise hazard. In the presence of dogs and facilities should be designed with due consideration for noise reduction. Dog quarters should be shielded to reduce the noise for species held around them.

Transportation:

Dogs are typically transported to research facilities by animal vendors. Research dogs must be protected during shipment to prevent exposure to other dogs that may be carrying disease. Most dogs are vaccinated at least three weeks before shipment. The research facility must coordinate closely with the vendor as all documentation must comply with federal state and local regulations. Care must be exercised to comply with the Animal Welfare Act regulations for shipping of dogs. Requirements exist for records, shipping containers, food and water access, observation during transport and maintaining an acceptable environment. This latter includes ventilation parameters, avoiding exposing the dogs to temperatures above 85°F for more than 4 hours or exposing dogs to temperatures below 45°F for periods greater than 45 minutes.

Record Keeping:

The USDA has required records for dogs that must be kept including unique animal identification, Acquisition records, supplier registration or license number, date of acquisition and description of the dog, plus record of disposal, method and name plus address of new holder and a copy of the acquisition records. The annual report of the research facility filed each year detailing dog use during the previous federal fiscal year.

Other required records include: **Cage cards** that include investigator name, protocol number, date of acquisition, birth date, account number being recharged if different from protocol number and the animal source. Some facilities utilize implantable microchip transponders for animal identification replacing tattoo ID or collars. **Health records** are required to document adequate veterinary care when health problems occur. These include all health related samples collected, diagnostic testing results, treatment administered, and the resolution of the problem to include euthanasia and necropsy findings and reports. These steps are very important. This is the one that has been in **Experimental manipulation records** and are required to document manipulations like surgery, anesthesia or collection of samples from the dog. **Census records** are required for all animals in all holding rooms.

Daily care and observation records are also required to prove that all animals are observed and cared for every day, and the initials of the person observing the animals and providing their care.

If the animals are to be used in a breeding colony then **breeding colony record keeping** is required to include reproductive cycle stages, male and female pairing data, breeding behavior, gestation length, litter size and composition, plus id of offspring and birth weight.

If dogs are quarantined before being added to an existing colony records of all activities and observations during quarantine are also required.