
1. PURPOSE

This Standard Operating Procedure (SOP) describes routine husbandry procedures for dogs.

2. RESPONSIBILITY

Animal care staff, veterinary care staff, facility supervisors, Facilities Manager.

3. MATERIALS

- 3.1. Darwin cage cards
- 3.2. Scale
- 3.3. Nail clippers
- 3.4. Bathing and grooming supplies
- 3.5. Feed
- 3.6. Bedding
- 3.7. Disinfectant

4. PROCEDURES

4.1. Observation of animals:**4.1.1. Daily:**

- 4.1.1.1. Observe all animals for illness, injury and general condition, including weekends and holidays.
- 4.1.1.2. Check intact females for heat.

4.1.2. Monthly:

- 4.1.2.1. Conduct more a detailed observation of all dogs including, but not limited to, general condition, fur, thorax and abdomen, ears, limbs and foot pads.
- 4.1.2.2. Weigh the dogs.
- 4.1.2.3. Provide basic care such as ear cleaning, toenail clipping and baths (can be done more often as needed).
- 4.1.2.4. Document body weight, observations and basic care in the medical record.

4.2. Emergency and holiday care:

- 4.2.1. Provide routine care and husbandry for all animals on weekends and holidays.
- 4.2.2. Make provisions for emergency care by providing both work and after hours contact information for Principal Investigators (PI's) and their staff. Provide special requests or instructions if needed.

4.3. Records and documentation:

- 4.3.1. Identify each dog held in the research facility with a tattoo, or collar applied by the facility that individually identifies the dog by number.
- 4.3.2. Unweaned puppies need not be individually numbered as long as they are maintained in the same primary enclosure as their dam.
- 4.3.3. Record keeping:
 - 4.3.3.1. Keep a day-to-day log of events, including medical procedures, for the life of the dog.
 - 4.3.3.2. Maintain records on procurement, transport and disposal of all dogs and an inventory of dogs in the facility.

- 4.4. Food and water:
 - 4.4.1. Feed animals to meet current National Research Council (USA) recommendations for canine nutrition.
 - 4.4.2. Food storage:
 - 4.4.2.1. Store feed on pallets off the floor and 4–6 inches away from walls, in a vermin-proof storeroom.
 - 4.4.2.2. Store open feedbags in leak-proof containers with tightly fitting lids.
 - 4.4.2.3. Maintain temperature and humidity control in the storeroom. Avoid temperatures above 21°C and extremes in humidity.
 - 4.4.2.4. Use feed within six months of the milling date.
 - 4.4.2.5. Stack feed in a manner that allows easy reading of the milling date.
 - 4.4.3. Feeding:
 - 4.4.3.1. Design and place feeders to allow easy access to food and to minimize contamination with urine and feces. Allow enough space and feeding points for group housed animals to minimize competition for food.
 - 4.4.3.2. Feed adult dogs at least once a day, unless otherwise recommended by attending veterinarian. Offer *ad lib* (free choice) feeding unless required by the protocol or by the veterinarian.
 - 4.4.3.3. Minimize changes in diet and make them only according to recommendations by the veterinarian in conjunction with the Principal Investigator.
 - 4.4.4. Offer fresh, clean, potable, uncontaminated water *ad lib*.
 - 4.4.5. Check automatic watering devices daily, and flush them weekly, for proper operation and cleanliness, or whenever there is a suspicion of malfunction.
 - 4.4.6. Monitor water quality routinely to ensure that it is free of contaminants that could potentially expose animals to chemical or infectious agents. Refer to SOP for water quality monitoring requirements.
- 4.5. Social and environmental enrichment:
 - 4.5.1. Refer to Environmental Enrichment Program for Dogs SOP.
 - 4.5.2. Group-housed dogs will benefit from, but are not required to have, exercise programs, as long as the total floor space of the group pen is equal to the sum of the required floor space for each dog.
- 4.6. Quarantine procedures:
 - 4.6.1. Dogs from approved vendors are not required to be quarantined.
 - 4.6.2. Contact the facility veterinarian for information regarding dogs from any other source.
- 4.7. Euthanasia and disposal of dead animals;
 - 4.7.1. Euthanize dogs as per Large Animal Euthanasia SOP.
 - 4.7.2. Euthanasia must be conducted by trained and experienced staff.
 - 4.7.3. Dispose of dead animals by incineration.
- 4.8. Pest control:
 - 4.8.1. Refer to SOP for a description of the vermin control program.
- 4.9. Environment and environmental control:
 - 4.9.1. Maintain room temperatures between 18°C to 29°C.
 - 4.9.2. Maintain relative humidity between 30% and 70%.
 - 4.9.3. Provide 10 to 15 complete air changes per hour of 100% outside air.
 - 4.9.4. Maintain a daily log of room temperature and humidity.
- 4.10. Lighting:
 - 4.10.1. Provide a regular diurnal lighting cycle.
Note: Lights are controlled by timers with a photoperiod of 12 to 14 hours of light. Check the timer performance regularly.

4.11. Space requirements

- 4.11.1. Follow the Canadian Council on Animal Care (CCAC) recommendations for space requirements

Note: These should be considered minimum requirements and should be exceeded for long term housing of dogs.

4.12. Bedding

- 4.12.1. Unless dogs are housed on appropriate elevated meshed floor, provide approved bedding (e.g., wood shavings, shredded paper or cellulose). Cedar shavings are not recommended, due to the presence of aromatic hydrocarbons.
- 4.12.2. Use a sufficient quantity of bedding to keep the dogs clean and dry.
- 4.12.3. Store the bedding off the floor on pallets and in such a manner to prevent contamination.

4.13. Resting apparatuses:

- 4.13.1. Small primary enclosures with suspended flooring: provide a resting board or operational means to facilitate keeping the dog clean and dry.
- 4.13.2. Direct contact flooring: provide bedding or a resting apparatus to allow the dogs a comfortable place to lie and reduce body heat loss.

4.14. Cleaning and sanitation of cages:

- 4.14.1. Clean primary enclosures daily to remove excessive amounts of dirt and debris. When cleaning is done by flushing, the animals must be kept dry.
- 4.14.2. Disinfect all surfaces at least every other week to reduce or eliminate microorganisms.
- 4.14.3. The animals must not be in direct contact with the disinfectant.
- 4.14.4. Clean and sanitize equipment thoroughly at least every two weeks, more frequently if needed.

4.15. Transportation

- 4.15.1. Refer to Animal Transport SOP.

4.16. Waste Management:

- 4.16.1. Deposit non-regulated or non-infectious Medical Waste and soiled materials in dumpsters.
- 4.16.2. Regulated or infectious Medical Waste is processed by McGill University's Waste Management program.

5. SAFETY

- 5.1. Working with dogs in a kennel setting can be very loud. Check with facility supervisor regarding requirement for hearing protection and refer to Personal Protective Equipment SOP.