

KHALSA COLLEGE OF PHARMACY, AMRITSAR
RESEARCH ON ANIMAL POLICIES, OCTOBER 2020
GUIDELINES

Animal Care:

1. Cages should be checked first thing every day in the morning, to note the condition of the animals. A staff member will check the animal cages daily for visible signs of change or distress, such as leaky bottles, birth of new pups, decrease in food or water consumption, blood in cage, wounds, secretions around the eyes, nose and genital area, respiratory distress, constipation, diarrhoea, swelling, sluggishness, gait, dull coat or loss of hair. All concerns will be reported to the supervisor and depending on the severity of the concern, the attending veterinarian will be notified.
2. Cages should be changed at least once per week or more often as needed; while doing so, wellbeing of animals also should be checked.
3. Water bottles should be checked every day and fresh water should be added as needed.
4. Sterilize the water bottles once in a week
5. Shelves, cage holders, lids and bonnets should be cleaned at least once in a month
6. Room should be sanitized every three to six months.
7. Floors should be cleaned every day.
8. Feeding plates should be wiped weekly.
9. Each cage must have an identification card with the following information: protocol number, investigator's name, date received, strain, sex, date of birth, and number of animals per cage.
10. Only items that are essential to the animal care of that room should be stored in the animal housing room.
11. The floor drains should be checked every day and flush out if necessary.
12. Doors should be sanitized once in a week.

Animal Procurement

All animals must be acquired lawfully as per the CPCSEA guidelines. A health surveillance program for screening incoming animals should be carried out to assess animal quality. Methods of transportation should also be taken into account.

Each consignment of animals should be inspected for compliance with procurement specifications and the animals should be quarantined and stabilized according to the procedures appropriate for the species and circumstances.

Quarantine

Quarantine is the separation of newly received animals from those already in the facility until the health and possibly the microbial status of

the newly received animals have been determined. An effective quarantine minimizes the chance for introduction of pathogens into an

established colony. The duration of quarantine for small lab animals ranges from one week to one month.

Stabilization

Regardless of the duration of quarantine, newly received animals should be given a period for physiologic, psychologic and nutritional stabilization before their use. The length of time stabilization will depend on the type and duration of animal transportation, the species involved and the intended use of the animals.

Separation

Physical separation of animals by species is recommended to prevent interspecies disease transmission and to eliminate anxiety and possible physiological and behavioral changes due to interspecies conflict. Such separation is usually accomplished by housing different species in separate rooms, cubicles or cages. If two species have a similar pathogen status and are behaviorally compatible, it shall be acceptable to house different species in the same room. People should be restricted from entering in to the facilities unless otherwise required and after handling these animals they should not be handling any other animals in the facilities.

Surveillance, Diagnosis, Treatment and Control of Disease

All animals should be observed for signs of illness, injury, or abnormal behavior by animal house staff daily, but more-frequent observations might be warranted, during postoperative recovery or when animals are ill or have a physical deficit. It is imperative that appropriate methods be in place for disease surveillance and diagnosis.

Post mortem examination and signs of illness, distress, or other deviations from normal health condition in animals should be reported promptly to ensure appropriate and timely delivery of veterinary medical care. Animals that show signs of a contagious disease should be isolated from healthy animals in the colony. If an entire room of animals is known or believed to be exposed to an infectious, the group should be kept intact and isolated during the process of diagnosis, treatment and control. Diagnostic clinical laboratory may be made available.

Animal care and technical personnel

Institutions should employ people trained in laboratory animal science or provide for both formal and on-the-job training to ensure effective implementation of the program.

Personal Hygiene

It is essential that the animal care staff maintain a high standard of personal cleanliness by using appropriate Personnel Protective Equipment (PPE) e.g. change of uniforms, footwear etc.

Clothing suitable for use in the animal facility should be supplied and laundered by the institution. A commercial laundering service is acceptable in many situations. It is acceptable to use disposable gloves, masks, head covers, coats, coveralls and shoe covers. Personnel should change clothing as often as is necessary to maintain personal hygiene. Outer garments worn in the animal rooms should not be worn outside the animal facility.

Washing facilities appropriate to the program should be available. Personnel should not be permitted to eat, drink, smoke or apply cosmetics and perfumes in animal rooms. They should finish the work with animals as early as possible and sit somewhere else outside and not in the animal rooms / areas.

Multiple surgical procedures on single animal

Multiple surgical procedures on a single animal for any testing or experiment are not to be practiced unless specified in a protocol only approved by the IAEC.

Durations of Experiments

No animal should be used for experimentation for more than 3 years unless adequate justification is provided.

Physical Restraint

Brief physical restraint of animals for examination, collection of samples, and a variety of other clinical and experimental manipulations can be accomplished manually or with devices be suitable in size and design for the animal being held and operated properly to minimize stress and avoid injury to the animal.

Important guidelines for the use of restraint equipment:

- Restraint devices cannot be used simply as a convenience in handling or managing animals.
- The period of restraint should be the minimum required to accomplish the research objectives.
- Animals to be placed in restraint devices should be given training to adapt to the equipment.

Provision should be made for observation of the animal at appropriate intervals. Veterinary care should be provided if lesions or illness associated with restraint are observed. The presence of lesions, illness, or severe behavioral change should be dealt with by the temporary or permanent removal of the animal from restraint.

Physical Facilities

The physical condition, design and size of an animal facility depend on the scope of institutional research activities, animals to be housed, physical relationship to the rest of the institution, and geographic location. A well planned, properly maintained facility is an important element in good animal care.

Location of animal facilities to laboratories

Good animal husbandry and human comfort and health protection require physical separation of animal facilities from personnel areas such as offices, break room, training and education room.

Laboratory animals are very sensitive to their living conditions. It is important that they shall be housed in an isolated building located as far away from human habitations as possible and not exposed to dust, smoke, noise, wild rodents, insects and birds.

This separation can be accomplished by having the animal quarters in a separate building, wing, floor, or room. Careful planning should make it possible to place animal housing areas adjacent to or near laboratories, but separated from them by barriers such as entry locks, corridors, or floors.

While planning an animal facility the space should be well divided for various activities. The animal rooms should occupy about 50-60% of the total constructed area and the remaining area should be utilized for services such as stores, washing, office and staff, machine rooms, quarantine and corridors. The environment of animal room (Macro-Environment) and animal cage (Microenvironment) are factors on which the production and experimental efficiency of the animal depends. Since animals are very sensitive to environmental changes, sharp fluctuations in temperature, humidity, light, sound and ventilation should be avoided.

Functional Areas

Sufficient animal area required to:

Ensure separation of species or isolation of individual projects when necessary.

Receive, quarantine, and isolate animals; and

Provide for animal housing

Specialized laboratories or

Receiving and storage areas for food, bedding

- Pharmaceuticals and biologics, and supplies
- Space for administration, supervision, and direction of the facility
- An area for washing and sterilization equipment and supplies
- An autoclave for equipment
- Food and bedding; and separate areas
- For holding soiled and cleaned equipment
- An area to store wastes prior to incineration or removal

Physical Facilities

Building materials should be selected to facilitate efficient and hygienic operation of animal facilities. Durable, moisture-proof, fire-resistant, seamless materials are most desirable for interior surfaces including vermin and pest resistance.