

## **PURPOSE**

The purpose of these procedures is to define the requirements for the transportation of all animals used in the research and teaching programs at the University of Saskatchewan and its related facilities.

## **SCOPE**

These procedures apply to the transport of all experimental animals used in the research and teaching programs at the University of Saskatchewan; the transport of animals from one animal facility to another; and, the temporary movement of animals to and from laboratories or specialized equipment.

All animals transported to, from and within the University of Saskatchewan must be transported in compliance with these procedures, and in compliance with the applicable Canadian Council on Animal Care (CCAC) guidelines. The CCAC guidelines on procurement of animals used in science (2007) are referenced.

## **RESPONSIBILITY FOR OVERSIGHT**

Responsibility for oversight of these animal transportation guidelines rests with the University Animal Care Committee (UACC).

## **GENERAL PRINCIPLES**

Transport of animals can result in significant stress, and have a significant impact on the animals' welfare. All transportation of animals should be planned to minimize transit time (point-to-point transport without stopping, if possible), address any occupational health risk, and protect the animals from physical trauma, the risk of infection, temperature extremes and overcrowding. As noted in the CCAC guidelines on procurement, "The objective of any method of transportation is to ensure the safety, security and comfort of the animal, while moving it efficiently to its destination. Adherence to principles of humane transportation and handling during the transport period and on arrival at the institution should help ensure that, when the animal is used in research, teaching or testing, the results are meaningful and scientifically valid."

Generally, temperature extremes are to be avoided when animals are transported and special precautions or postponement should be considered when temperatures are beyond the animals' comfort zone.

All experimental animal transport must be described in the animal use application and approved by the Animal Research Ethics Board (AREB). Animals can only be transported to other facilities (e.g., laboratories, study areas) outside of the animal facilities for which the principal investigator has received approval from the AREB. For scheduled animal relocations a relocation request form

should be submitted to the facility manager or his/her designate where the animals are permanently housed a minimum of two business days in advance of the scheduled transport day. Emergency transport (e.g., to the Veterinary Teaching Hospital or Prairie Diagnostic Services) may occur from time to time.

All animal transport between facilities (buildings) should preferably be done by trained animal care staff, to ensure compliance with the CCAC guidelines and these procedures, but may be done by appropriately trained researchers. Those overseeing the transportation of animals must be knowledgeable about the specific container requirements, temperature and ventilation of both the container and the environment during transportation, care of the animals prior to and during transport, and the requirements for labelling and documentation. It is essential that contingency plans are considered and every attempt is made to anticipate potential delays during transport, such as customs clearance, to ensure that the comfort and health of the animal is assured.

Some animal relocations may require quarantine, isolation, health assessment, and management to identify any health concerns and control disease before the animals are used for research.

All animals in transit should be accompanied by the appropriate documentation. Such documentation should be consistent with the regulations where applicable (e.g., livestock manifests).

## **TRANSPORT CONTAINERS / VEHICLES**

All animals must be transported in approved transport containers and vehicles. Transport containers and vehicles must be approved by the University Veterinarian. Approved containers are those which will ensure the comfort of the specified species for the duration of transport. In most cases, the containers provided by a reputable commercial supplier and the method used for transport are acceptable. However, it is the condition of the animal when it arrives at its destination that will provide the ultimate decision on whether a transport container and/or method was suitable. Animals received in poor condition from commercial suppliers should not be transported in a similar manner unless extenuating circumstances can be demonstrated to have taken place.

## **TRANSPORT CONTAINERS**

Animals should be transported in animal specific types of animal transport carriers designed for that purpose (e.g., enclosed filtered cages for rodents, sanitizable metal or plastic carriers for small mammals, or disposable cardboard containers for poultry chicks, etc.). Transport containment should provide adequate ventilation with minimum visualization of the animals. When in public spaces, the container should be covered to minimize stress to the animal and to ensure less visibility for the public.

Care must be exercised in handling containers holding live animals. Containers must not be tossed, dropped, needlessly tilted, stacked in a manner which may reasonably be expected to result in their falling, or handled in any manner which may cause physical trauma or stress to the animals.

## Some of the specific requirements for transport caging are:

### Laboratory rodent transport:

Laboratory rodents must be transported in opaque filtered transport containers specifically designed for that purpose, or micro-isolator filter top holding cages, with accompanying food and water sufficient for the duration of their stay. Transport container lids must be fastened to ensure the animals cannot escape should the cage be inadvertently dropped. If the primary enclosure (cage) is clear plastic or does not have a secured lid, that cage should be placed within a sanitized secondary container.

The transport of genetically modified animals must also comply with regulatory requirements for security. As well, genetically modified animals may have specific welfare issues with respect to transport that must be considered.

Density of rodents being transported: The number of rodents per transport cage should not exceed industry standards for air transport crates.

### Laboratory rabbit transport:

Laboratory rabbits must be transported in crates approved for that species, with accompanying food and water sufficient for the duration of their stay.

### Dog and cat transport:

Dogs and cats must be transported in crates approved for those species.

### Fish transport:

The transport of fish should be in accordance with the CCAC guidelines on fish. Fish must be transported in opaque enclosed containers (such as buckets with lids) or properly sealed plastic bags sold commercially for this purpose, containing the appropriate amount of water and oxygen for the duration of their stay. It is essential that the temperature of the container is effectively controlled to keep the fish within their range of thermal tolerance. For cold water species, the bags or containers should be transported on ice in larger containers. The use of an air pump to supply oxygen to a container can be used, but this requires a container that will allow the passage of an airline but prevent the escape of fish or spilling of water.

### Farm animals:

The transport of farm animals should be in accordance with the Recommended code of practice for the care and handling of farm animals – Transportation (CARC, 2001; <http://www.nfacc.ca/codes-of-practice/transport>), and must also be in compliance with Part XII of the Federal Health of Animals Regulations.

Smaller farm animals (e.g., piglets, lambs, goats, sheep) should be transported in approved containers for their species.

### Poultry transport:

Poultry must be transported in approved containers for those species.

### Wildlife:

The transport of wildlife should be in accordance with the CCAC wildlife guidelines.

## **ANIMAL TRANSPORT VEHICLES**

Vehicles used to transport animals should be appropriate for the size, environmental requirements and species of animal being transported. For larger animals or animals that are not able to be transported in a suitable container within the transport vehicle, the transport vehicle should be specialized for transporting the species in question or approved by the University Veterinarian. Approval of a transport vehicle by the University Veterinarian must be requested well in advance of the anticipated transport date. In the case of using a non-species specific transportation vehicle, the vehicle should be designed to contain animals in safety and comfort, and be readily sanitizable.

When transport by approved UofS vehicles is not feasible, an approved outside vendor must be used for the movement of all animals.

Animals must not be transported in personal vehicles unless approval has been obtained from the University Veterinarian or delegate (e.g. Animal Welfare Veterinarian).

Animals must not be transported by public transportation (e.g., buses or taxis).

## **ANIMAL RECEIVING**

Before animals are delivered, the facility must be notified to assure that appropriate housing can be made available and that trained personnel will be present to receive the animals, ensure they are in good condition, and place them in the appropriate holding location. Received animals should always be placed in quarantine until their health can be adequately assessed in order prevent the spread of disease.

## **DEALING WITH UNEXPECTED CIRCUMSTANCES**

An SOP should be in place to address actions to be taken in the event of an accident, breakdown or other unforeseen complication during transport of the animals.

## **TRANSPORTING LIVE OR DEAD ANIMALS CONTAINING BIOHAZARD RISKS**

Transport of bio-hazardous materials in general poses special problems. This is significantly amplified (e.g., potential spread through excreta) when the material is contained in an animal. It is therefore important that appropriate precautions are incorporated both during the transportation and after the animals have arrived at their destination. Such transport must also comply with the WSEP regulations.

## **SANITATION PRACTICES**

Vehicle cargo areas used to transport animals must be cleaned and decontaminated as necessary to prevent contamination of future deliveries. All dirty cages must be returned to the animal facility and sanitized before re-use.

## **NON-COMPLIANCE**

Failure to comply with these procedures will be reported to the UACC and can be subject to specific action including suspension of research privileges with animals.

*Approved by the UACC, 31 October 2011*