



## Transport of animals and microorganisms - internal

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### 1. Purpose

This SOP explains the procedures and regulations involved in the internal transport of animals and microorganisms between animal units and experimental laboratories within AEM. It also explains what should be done with used transport cages when they are no longer in use.


### 2. Scope

The procedures described in this SOP are relevant to all researchers and animal technicians who need (and have permission) to transport animals, GMO animals and/or microorganisms between units and/or laboratories.

It is for several reasons inappropriate to house live animals out of AEMs laboratory animal units. The animals become stressed by transport to unfamiliar surroundings, and there is a possibility for spread of animal allergens. However, there are other considerations to be taken into account when bringing animals to external laboratories, e.g. access to special equipment that can not be introduced into the animal facility. NO ANIMALS should be housed in external laboratories beyond the length of a working day, unless by special agreement with AEM.

### 3. Definitions

N/A

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## 4. Health and safety

Transportation between experimental units or laboratories must be done as safely as possible to ensure animal welfare and minimise the risk of contamination and allergen spread.

### 4.1. In case of injury the following procedures should be followed:

- *Animals*  
In case the animal escapes during transport, the employee involved must remain the area until the animal is caught. If this is not possible contact AEM.
- *Microorganisms*  
In case of spills of biologically active material disinfect the affected area with Virkon S (2% solution that is 20g/l water). Contact time should be at least 10 min. AEM or SUND's Working Environment Section should be contacted.
- *Personnel*
- If the work involves the use of biological agents that can cause injury, information concerning what to do in the case of accident or injury must be included in a thorough risk assessment as well as in the project plan

## 5. Equipment

Depending on the classification of the animals or microorganisms being transported, the following equipment may be required:

- A single use transport cage
- A cage with a filter top
- An IVC cage
- An impact resistant, ABS plastic box.
- Plastic tubes for transporting microorganisms.
- Plastic bags.
- Transport cart (to place cages with live animals on).
- Virkon S

## 6. Training type required

Self study  Peer learning  Formal training

## 7. Skill requirements

Mandatory  Unit specific  Specialized

## 8. Procedure

### 8.1 Packaging labeling and transport of animal cages

- Change the wire lid so it can accommodate the filtertop. Diet and water should be included.



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- Place a filtertop on the cage (this is to minimize the spread of allergens when the cage is in the laboratory).
- IVC cages do not require a filtertop as they already have a sealed top. Animals can stay up to 48 hours in a sealed IVC-cage without active ventilation. Alternatively a filtertop can replace the regular IVC top.
- Place the cage in a plastic bag and secure it with a knot (2 barriers). **NOTE** that the animals may only be placed in the cage covered by the plastic bag for up 1 hour.
- The animals in the cage must be identifiable – i.e. the cage card is attached, or the information is transferred to another cage card, which is included with the cage.
- Contact information about the unit that is sending out the animals must be on the cage, including the contact information about the researcher who is receiving the animals.
- Remember to describe the GMO class, if applicable i.e. GMO animals, GMO class 1 or GMO class 2 (special guidelines apply for GMO 1+2). Under “Other”, describe the box contents, e.g. animals or microorganisms (see later).
- Additionally, the cage must be marked with a label (**fig. 1**) indicating microorganisms/GMO.
- Place the cage on a cart outside the unit. The cart must be used for animal comfort and to minimize the risk of dropping the cage.
- The above description can be seen in **figure 2**.
- In the Panum Building, animals must be transported at 01 level (use the lifts down to 01 level and up to the desired laboratory).
- In the laboratory remove the plastic bag around the cage. (The cage may be reaped in a plastic bag for up to 1 hour.)
- The same procedure is followed when the cage is returned to the unit.
- At Panum, empty cages and cage material is returned in rooms 6.01.47a, 12.01.47, 18.01.47E, 24.01.51 and packed in a closed plastic bag.

### 8.2 Animals from Unit 16-2


- In the rare case that animals are taken out of Unit 16-2 this is done in a single use transport cage, encased in 2 plastic bags, that is disinfected with Virkon S (for at least 10 minutes) prior to exiting the unit. After use the cage, including content is discarded as clinical waste in a sealed plastic bag.

### 8.3 Transport to laboratories at different address

1. The unit the animals are to be transported from **MUST** be informed. The sending unit will ensure that the receiving unit is also informed.
2. The researcher **MUST** always inform the sending unit under which P-number the animals should belong to.
3. Every Tuesday animals may be transported free of charge between the different animal units (quarantine permitting). Requests for transport on these days must be made no later than noon the day before.
4. Transport may be requested on days other than Tuesdays but will incur a fee. (Always follow steps 1-3.)
5. Alternatively, researchers may transport animals themselves. (Always follow steps 1-3.) Correct packaging must be used and the following rules apply:
  - Animals must be transported via the tunnel system under Panum, RH and the Biocenter via trolley.
  - The researchers own car may be used between Panum, Biocenter, RH and AKB.
  - Other forms of transport such as bicycle or on foot etc in public spaces is not permitted.

### 8.3 GMO class 1 animals

- Animals from GMO class 1 classified units may only be introduced to GMO class 1 classified laboratories.
- The same procedure is followed as for normal GMO animals. However, before leaving the classified area, the bag must be disinfected with Virkon S on the outside (for at least 10 minutes).
- Waste and reusable material should be handled according to relevant procedures (disposed of as clinical waste, chemically disinfected or autoclaved).

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## 8.4 GMO class 2 animals

- Animals from GMO class 2 classified units may only be introduced to GMO class 2 classified laboratories.
- The same procedure is followed as for GMO animals. However, 2 bags are for security reasons placed around the cage (3 barriers). The outer bag must be disinfected with Virkon S on the outside before the classified area is vacated (minimum 10 minutes).
- Waste and reusable material should be handled according to relevant procedures (disposed of as clinical waste, chemically disinfected or autoclaved).

## 8.5 Transport of microorganisms: GMO class 1 and class 2

- For transport of microorganisms between the individual laboratories or to and from AEM's experimental units, use boxes as shown in **figure 3 and 4**.
- The box is of impact-resistant ABS plastic and can resist being dropped from 1.5m height.
- The box is marked with a label indicating microorganisms/GMO (see **fig. 1**).
- The box can be locked if necessary, but is in any case closed with a latch that does not immediately open.
- Within the box microorganisms must be kept in plastic tubes. For GMO class 2, an additional larger plastic tube around the plastic tube with content must be used before it is, for example, placed on ice. In this situation there are 3 barriers between the microorganism and its surroundings.
- The box must be disinfected with Virkon S on the outside when it leaves the classified area.

## 9. Signs

N/A

## 10. References

## 11. Appendices

Figure 2.

**GMO KL. \_\_ + DYR / GMO CLASS \_\_ + ANIMAL**



- Affald / Waste
- Genbrugsartikler / Reusable items
- Andet materiale / Other material

**Figure 1.** Label for identification.



**Figure 2.** Wrapping, cage card with relevant info, labeling and placed on a trolley.



**Figure 3-4.** Box for transporting GMO class 2 microorganisms.