

Laboratory Animals Good Transportation Practice

Whereas

- the European legislation and good research practice require animals used in research to be purpose bred,
- those animals cannot always be bred in or close to research sites,
- transportation in good conditions greatly contributes to the overall welfare of laboratory animals,

the EFPIA Research and Animal Welfare Group carried out a review of key laboratory animals transportation legislation and guidance¹ to identify the good practice that shall become standard for the users' establishments, breeders and transportation companies.

As a result of this review the EFPIA Research and Animal Welfare group concluded the LASA guideline referenced below – educationally, exhaustively and effectively – covers all relevant issues of transportation of laboratory animals:

Report of the Transport Working Group established by the Laboratory Animal Science Association (LASA) <http://lan.sagepub.com/content/39/1/1.full.pdf>

Therefore, the EFPIA Research and Animal Welfare Group recommends that EFPIA members, breeders, Contract Research Organizations and transporters consider it as a reference document when planning and carrying out transportation of laboratory animals.

The annex to this document highlights specific points to consider for dogs, non-human primates and (mini)pigs.

Updated: June 2017

¹ Report of the Transport Working Group established by the Laboratory Animal Science Association (LASA), Guidelines for the Humane Transportation of Research Animals (ILAR), Container Requirements – IATA, (EC) No 1/2005, European Treaty Series – No. 193.

Good transportation practice

Dogs

- A 'robust' dog that has been accustomed to new and unfamiliar stimuli (sounds, smells and environments) will be less affected by the total impacts of transportation
- Wherever possible, dogs should be habituated to transport containers by placing the containers in their holding pen
- Exposing dogs to the transport containers a few days before loading will reduce anxiety levels
- Short periods of confinement and habituation to motion (e.g. in carts or trolleys) should also be considered, particularly before longer journeys
- An uninterrupted journey is preferable to one broken by stops or rest periods
- Dry treats or biscuits in limited amounts should be available for longer journeys
- Transportation of dogs in pairs (by plane) or in established, compatible groups (by truck) can reduce transport stress and improve welfare
- Dogs should be transported separately from other species

Non-Human Primates

Before transport

- Health monitoring at the breeder/supplier incl. veterinary exams
- Pre-selection of animals in countries of origin and separation from main colony (pre-quarantine)
- Socialization of animals to humans and minor handling procedures
- Acclimation to transport boxes
- Documents, i.e. import/export permit, CITES, health certificates (country specific, language required by countries, AFF number), need to be available on time to avoid any delays during customs clearance
- Logistics, i.e. alternative transport route/disaster list/emergency contact list, outside climate conditions (heat/cold)
- Special requirements (juvenile/pregnant, aged animals)?
- System of closure for boxes to avoid any risk of breakaway

During transport

- Succession of road transport then air transport should be well organized to avoid delays
- Specific waiting rooms/trucks taking into account by needs of species?
- Road transport with specific training of drivers
- Specific training of airport packers?
- Travel time by land-air-land (direct flights)
- IATA cages
- Single/pairs depending on social groups
- Cages with bedding, food and water (vegetables, fruits), used enrichment items
- Communication between supplier, carrier, vet authorities and quarantine facility to avoid any delays
- Route plans with procedures in case of crash
- Control system during transport (video, data logger)
- NHPs should be transported separately from other species

After transport

- Immediate reception of animals under veterinary supervision, careful opening of truck doors in case of breakaway
- Used enrichment items
- Quarantine facility and procedures (single/pair/group housing)
- Recovery time of minimum of 3 days with limited intervention (veterinary emergencies)
- Habituation to new diet, personnel
- Health checks
- Disaster Plan (disease outbreak, necropsy)
- Information on animal arrival to national authorities (TRACES)
- Training of Animals

(Mini)pigs

- Piglets should not be transported until at least 2 weeks after weaning to ensure that they are capable of eating a dry pellet diet and drinking water from a bowl during transportation
- If transportation of newly-weaned piglets is considered, they should always be assessed by a veterinarian, and animal welfare bodies should be consulted
- To make sure that the (mini)pigs feel secure they must be transported in a transport box with a minimum of 2 other (mini)pigs from the same pen
- Transport in groups is always preferred; obviously the (mini)pigs must be familiar with each other
- The (mini)pigs must be monitored frequently and offered fresh fruit and/or vegetables to help prevent dehydration and to encourage the (mini)pigs to eat during transportation. Small sized water bowls must also be available at all times and fresh water must be offered frequently
- The (mini)pigs have difficulties thermo-regulating. Therefore, they must not be exposed to extreme temperatures or temperature fluctuations. The (mini)pigs must be transported in an environment in which they can maintain their body temperature, i.e. between 18-22°C and for piglets temperature should be kept at 20-24°C
- The (mini)pigs must be protected from direct sunlight, extreme heat or cold, rain, snow, wind/draft or sudden high noise or movement. The (mini)pigs should not be left unattended in either in- or outdoor waiting areas
- It is important to recognize that the transition to transport box, transportation and relocation to a new environment at destination all represent a great stress factor for the (mini)pigs. Everything that can be done to facilitate this process should be done. Unloading the (mini)pigs from the transport vehicles should be done as calmly and quietly as possible not involving too many persons and transport boxes should always be kept at level. We recommend that the (mini)pigs remain in the same group of (mini)pigs with which they were transported
- (Mini)pigs should be transported separately from other species
- After arriving at the new facility, it is very important that the (mini)pigs have an acclimation period to reduce stress and to become familiar with their new surroundings, including their animal caretakers. We recommend following procedure:
 - At day of arrival: Talk calmly to the (mini)pigs when slowly approaching them. Give fresh food, water and bedding (straws, sawdust or towels). Avoid startling the (mini)pigs
 - When it is time for the (mini)pigs to leave the transport box, the door of the box should be opened and the animal should leave the box at own pace, possibly tempted by food. Ideally, the (mini)pig is left at destination in the transport box which may be collected at a later time, so that there is suitable time for the (mini)pig to leave the box
 - Day after arrival: A veterinary check/clinical examination is necessary, which should not be done on day of arrival; wait till next day. On the day after the arrival, the animal caretakers should gently start interacting/socializing with the (mini)pigs