

**OIE Discussion Paper for the IATA Live Animals and Perishables Board
Montreal, 20-22 October 2009**

Purpose

The purpose of this discussion paper is to commence a dialogue between the OIE and IATA on the serious problems currently impacting the international transport of research animals by air, and to identify options for collaboration in finding solutions to these problems.

Background

The establishment of the OIE Laboratory Animal Welfare *ad hoc* Group (LAWG) in 2007 provided the foundation for leadership by the OIE in setting standards for the use of animals in research. The serious problems currently impacting the international transport of research animals by air has been raised during discussions between the LAWG and international laboratory animal science organisations such as the International Council for Laboratory Animal Science (ICLAS) and the International Association of Colleges of Laboratory Animal Medicine (IACLAM), resulting in the strong recommendation at two LAWG meetings that the OIE should lend its support to addressing this problem.

Research animals may need to be transported between research institutions and commercial animal breeders for a number of reasons. Where relatively short distances are involved, for example animals produced in breeding facilities being transported to research institutions in the same country, producers have developed ground transportation systems and well-tested containers to reliably and safely transport animals to their destinations. For air transport of research animals, IATA Regulations prescribe the conditions of transport, including containers, inspection and certification.

Furthermore, over the last two decades there have been increasing numbers of specialised animals (almost exclusively rodents) bred in small colonies in research institutes and universities that have unique genotypes and phenotypes produced primarily through tailored genetic alteration. These colonies increasingly have been an important source of supply of research animals, both nationally and internationally, either as a small commercial enterprise at the research institution or for use in important collaborative research studies. Unlike large commercial producers of laboratory animals, the numbers of institutionally produced animals that must be transported may be relatively small for any given institution, but in the aggregate, can represent a substantial number of journeys and this is a critically important element in internationally recognised high quality research.

For those groups of animals for which economic or welfare considerations preclude the use of ground transportation (e.g. due to distance or geographical isolation), carriage by air is usually the most rapid, practical and humane option.

A relatively small number of species are routinely used in research with rats and mice representing by far the greatest numbers. Other species, including guinea pigs, gerbils, hamsters, rabbits, cats, dogs, pigs, nonhuman primates (consisting of only a few species), and fish (principally zebra fish) are also essential but used in relatively small numbers. Dogs and nonhuman primates used in research present important issues with regard to international transportation. Many dogs used in laboratories are obtained from US breeding colonies and nonhuman primates are imported from breeding colonies in Asia and Mauritius. These animals are air freighted to research institutes and are of critical importance in regulatory testing, particularly the final approval of human medicinal products, and in some special research fields (e.g. infectious diseases). In most cases it is not possible to replace these

species by other testing methods or models and access to these animals is critically important to maintaining progress in advancing human medicine.

The problem and its causes

The shrinking availability of research animal transport by air worldwide has become a growing threat to animal-based research, including safety testing of new medicines and disease diagnosis, and therefore to human and animal health and welfare.

Economically, politically and practically, transport of research animals has become unattractive for airlines, both nationally and internationally, while the complexities in current systems for such transport result in inefficiencies that can lead to failure of the animals to arrive, or their arrival in a state of compromised health or welfare. Only forty per cent of the commercial air fleet has the appropriate environmental controls to carry animals but the problem is more one of policy than practicality. Airlines do not need to carry research animals and many choose not to for a number of reasons.

- It is a very small trade – live animals, most of which are companion animals or production animals, make up less than 0.1% of all cargo transported by air.
- It requires specialised environmental controls and consolidations and cutbacks within the airline industry have led to fewer suitable cargo planes being in service.
- Complex transport regulations and documentation requirements increase the likelihood of errors causing delays to shipments and potentially jeopardizing animal health and welfare.
- Some airlines have come under pressure from animal rights organisations to adopt a policy of refusing to transport certain species of research animals (e.g. nonhuman primates, cats and dogs). These are often the larger carriers with the most diverse route systems, which exacerbates the problem. Such policies have tended to spread throughout the industry as amalgamation of airlines has also led to harmonisation of policies.

An additional factor that has a bearing on the decisions of airline companies is the provision of inspection facilities to handle incoming shipments of live animals at the major airports. Where a need for significant investment to upgrade airport facilities is identified, the willingness of airlines and airport operators to invest is unclear and individual operators may be unwilling to take the lead in addressing the problems identified.

As a result of these factors, it is becoming both more difficult and more expensive to obtain animals for research. This situation has the potential to reduce the ability to carry out research that is critically important for human and animal health worldwide. The risks from inadequate testing of biological products are immeasurable while the lack of availability of research animals could result in delays in vital medical and veterinary research.

Proposed action

Transporters and government agencies must become fully apprised of the importance of air transportation of research animals and encouraged to take steps to support the capacity to transport these animals internationally and to make the transport system more practical and economic.

Dialogue between transporters, the science community, NGOs and governmental bodies should take place to share awareness of the vital role that research animals play in

maintaining human and animal health. The OIE should, in consultation with IATA, develop and disseminate materials on this topic.

The development of an electronic system for constructing required documents for national and international transport of laboratory animals would help to reduce documentation errors and consequent problems with individual shipments.

In relation to BIPs, the problem of airport infrastructure is complex and will require collaboration between the private and the public sectors to resolve. Through communication with its Members, the OIE should promote support for the development of adequate infrastructure to facilitate international air transport under conditions that assure the health and welfare of research animals. Within governments, multiple agencies are involved in the regulation and control of airports and air transport. Therefore collaboration across government agencies is needed to address this problem.

Recommendations

The OIE has identified the following actions for discussion with the LAPB:

1. Alert IATA and its members to this issue and explain the importance of urgently taking steps to maintain the ability to transport research animals worldwide;
2. Alert OIE Members to the need to address the problems of infrastructure of international airports and veterinary inspection arrangements to facilitate air transport of research animals.
3. Continue to work with NGOs and the public to explain the need for research animals and the need to move them between institutions.
4. OIE to continue to work on establishing global standards for the use of animals in research and education.
5. In liaison with IATA, to review and update as needed the current IATA Regulations for air transport of research animals.
6. Provide support for IATA's work on electronic certification for live animals including research animals.

The OIE thanks Dr Virginia Williams (MAF, New Zealand) for assistance in drafting this discussion paper and acknowledges two articles published by Dr William J. White, President of IACLAM: "Decreasing availability of transportation for laboratory animals" and "Transportation and a mouse passport".