

Bruce W. Kennedy, MS, RLATG, CMAR, CPIA, Column Coordinator



# Training to be a mouse shipper

Gary J. Barron, BA, LATG

Transportation of rodents is a common occurrence at animal facilities but is by no means a routine or simple task. It requires both scientific and managerial skills, and there are numerous important details to learn. Some research institutions appoint dedicated personnel to manage animal transportation, often called shipping or import/export coordinators; at other institutions, these duties might be assigned to veterinarians or laboratory managers. In many cases, those responsible for animal transportation learn 'on the job' and rely on input and suggestions from coordinators at other institutions as well as veterinarians, managers and supervisors at their own facilities. From my own experience, I've compiled the following overview of the areas of expertise most applicable to managing animal transportation.

## Education and certification

Shipping coordinators should obtain certification from the American Association for Laboratory Animal Science. A bachelor's degree in the life sciences can also be beneficial.

## General knowledge

Shipping coordinators should be familiar with the anatomy, physiology, nutrition, breeding, health and diseases of the animals to be transported. The concept of biosecurity should also be understood, as shipping coordinators act as 'gatekeepers' to protect their institutions from receiving sick and diseased animals and to provide clean and healthy animals to other institutions. Basic understanding of serology, parasitology, microbiology and histopathology is helpful. Coordinators should also be trained in handling animals, including restraint techniques, typical animal behavior and potential stressors that might

be specific to the animal strain. Finally, shipping coordinators should also be familiar with the characteristics of shipping crates and the animals' requirements while in transit.

## Regulations

Shipping animals is rule-intensive. Many federal agencies oversee transportation, including US Department of Agriculture, US Fish and Wildlife Service, US Centers for Disease Control and Prevention, US Department of Transportation and US Customs and Border Protection. To the list must be added state and country entities and the International Airline Transportation Association (IATA). According to the IATA website (<http://www.iata.org/>), "The IATA Live Animals Regulations (LAR) is the global standard and the essential guide to transporting animals by air in a safe, humane and in a cost-effective manner. Whether you are a shipper, a freight forwarder, an airline, or an animal care professional, the LAR is a must for transporting animals humanely and in compliance with airline regulations and animal welfare standards."

## Legal aspects

Animal transportation is also subject to contracts (such as Material Transfer Agreements) and, for international shipments, permits.

## Terminology

Animal shipment has its own language and terminology. There are many acronyms to learn as well.

## Clerical skills

Many forms and documents are required by stakeholders, particularly when exporting animals to other countries. Shipping coordinators must be able to read, comprehend and complete this documentation. Computer skills are crucial for maintaining lists of imports and exports, creating shipment labels and waybills, completing online forms and saving files. Coordinators must

also compile reports of data and file and maintain the necessary paperwork.

## Logistics

Shipping coordinators must be aware of weather, holidays and other events when scheduling shipments. Spring and fall are usually preferred for transporting animals because ambient temperatures are moderate, but shipments might take place during the summer and winter months as well. Coordinators must look ahead at the relevant weather forecasts for the entire journey, not just the local temperature at the time of arrival. The IATA restricts shipments when temperatures are too high or too low, and institutions have self-imposed limits as well.

## Communication and organization

Shipping coordinators must inform personnel at every phase of the shipment, talk to quarantine technicians to coordinate availability of the quarantine suite and communicate with researchers at both the receiving and the shipping institution to explain procedures and resolve issues. They must also keep orderly files, track multiple shipments at different phases simultaneously, tolerate tedious functions and operate with great efficiency.

## Common sense

Planning to ship animals isn't simple, and a clear head is needed to assess any potential issues. Each shipment should be considered unique, even if animals have been imported from or exported to the same institution before. Challenges can arise at any point, and creative approaches might be needed to address them.

Although I am no longer involved with scientific animal experiments, I feel that my role as a shipping coordinator furthers the research of many investigators. I hope that others can learn from my experience in this role to improve transportation management at their own institutions.

Barron is Import/Export Coordinator, Division of Comparative Medicine, Washington University School of Medicine, St. Louis, MO.