

# Top 5 Tips for Animal Transportation

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Companion animals may be transported for various reasons, including owner relocation and travel, animal participation in competitions and exhibitions, and relocation of homeless animals by humane groups to areas where adoption is more likely.<sup>1</sup> Animal health and welfare must be considered during all aspects of transportation. Veterinarians should be prepared to provide guidance to both humane groups and owners to ensure that companion animal transportation is safe and comfortable while adhering to state, federal, and international regulations. Below are the author's top 5 tips for safe, comfortable, and humane animal transportation.

## TOP 5 TIPS FOR ANIMAL TRANSPORTATION

1. Review Travel Regulations
2. Explain the Importance of Preventive Care
3. Recommend Permanent Identification
4. Identify & Mitigate Travel-Specific Risks
5. Discuss Steps to Protect Behavioral Health & Welfare

### 1 Review Travel Regulations

Regulations differ regarding intra-state, interstate, and international transportation of animals and vary according to species and purpose of travel (eg, sale, exhibition, vacation). Importation regulations are determined by the destination state; the office of the state veterinarian determines requirements for transportation of animals to or within that state. State regulations vary substantially and frequently are updated based on current trends and risks for pathogen transmission. Most states require proof of current rabies vaccination and a Certificate of Veterinary Inspection at minimum, although the minimum age for rabies vaccination varies. Dogs imported from a rabies-free country may be exempt from vaccination by the Centers for Disease Control but are subject to state regulations.<sup>2,3</sup>

Other requirements can include additional vaccinations, diagnostic testing, and limitations on duration of stay, depending on the purpose of travel. Animals granted limited durations of stay (eg, those traveling only for short-term exhibition) may be exempt from some vaccinations and testing. The United States Department of Agriculture's Animal and Plant Health Inspection Service maintains a pet travel website that details state-specific regulations that owners, humane groups, and veterinarians should review when planning travel with companion animals.<sup>4</sup>

For animals traveling by air, options generally include travel in the cabin as a carry-on or checked as cargo. Individual airlines should be consulted for details and regulations. Restrictions on animal age, breed, species, and size are common, as are stipulations on crate size and construction, type of aircraft, flight route and duration, and ambient

## UNDERSTANDING BEST PRACTICES FOR LARGE-SCALE ANIMAL RELOCATION

Veterinarians who advise shelters and rescue groups involved in large-scale animal relocation programs have access to a variety of evidence-based and experiential best practices.<sup>15-18</sup> Additional guidelines have been created for emergency large-scale evacuation events.<sup>19</sup> Each set of recommendations discusses the responsibilities of participating individuals and organizations at both source and destination shelters, recommends safe and humane housing and handling during transportation, and offers insight into the objectives of individual relocation programs as well as their risks and benefits. When planning large-scale relocation programs, population-level considerations must include steps to assess and minimize the risk for infectious disease transmission before, during, and after transportation, particularly when relocating animals to different geographic regions. Steps should be taken to ensure animal comfort and safety, and those involved in relocation should have a high degree of confidence that the overall risk:benefit ratio lies in favor of relocation for both the individuals and the affected animal populations as a whole.

temperatures at both point of origin and destination. Additional regulations, including exclusions involving specific countries and quarantine periods, often apply for international travel. The International Air Transport Association annually publishes an extensive set of guidelines for safe and humane air transportation of pets to which most major airlines are expected to adhere.<sup>5</sup>

## 2 Explain the Importance of Preventive Care

Veterinary visits before long-distance transportation and/or relocation should include a review of preventive healthcare guidelines and travel preparedness based on risk.<sup>6</sup> A thorough physical examination should be conducted, preventive treatments (eg, internal and external parasite control, core vaccinations) administered, and spay/neuter counseling provided as appropriate. A plan for follow-up assessment should be created for animals for which travel or relocation will be temporary, particularly if the travel destination has significant infectious disease risks.

The veterinary team should assist the owner or humane group in formulating a plan for emergency care during travel, which should identify after-hours veterinary hospitals in the travel area and ensure timely access to the animal's medical records. The owner may be provided with a printed copy of pertinent medical records or access to digitized versions. For animals with chronic conditions, an adequate supply of any ongoing prescription drugs for the duration of travel should be provided.

## 3 Recommend Permanent Identification

Animals that will be traveling must have adequate identification (ie, permanent identification with a microchip). Collars and tags are highly visible and do not require special equipment to read; however, they can be lost, stolen, damaged, or removed. The functionality of existing microchips should be confirmed using a microchip scanner and the accuracy of the registration information verified in the AAHA Universal Pet Micro-

chip Lookup database (**Table 1**). This database is not a registry, so missing or erroneous information must be corrected using an independent pet recovery service, which may require a fee. Each microchip company has a different fee structure and package of services. Free, instant, lifetime registration of any brand of microchip, along with listing in the AAHA database, is available through the Found Animals Microchip Registry (**Table 1**). International travel may require additional identification with an International Standards Organization-compliant (15-digit, 134.2-kHz) microchip.

Although not a form of permanent identification, collars and tags are still recommended in addi-

tion to microchips, as they can provide supplemental identification and increase the likelihood of lost pet recovery.<sup>7</sup> Identification tags should include the pet's name and the owner's name, address, and phone number. Ensuring the pet's microchip number also appears on an identification tag will aid in recovery in the absence of a microchip scanner.

## 4 Identify & Mitigate Travel-Specific Risks

Disease risks vary based on geographic region and should be discussed with the owner or humane group, along with activities that might enhance the animal's risk for exposure.

**TABLE 1**

### TRANSPORTATION INFORMATION RESOURCES

Source	Website	Uses
AAHA Canine Vaccination Guidelines: Lifestyle-Based Calculator	<a href="http://aaha.org/guidelines/canine_vaccination_guidelines/vaccine_calculator.aspx">aaha.org/guidelines/canine_vaccination_guidelines/vaccine_calculator.aspx</a>	Checklist for lifestyle characteristics to tailor vaccination recommendations
AAHA Universal Pet Microchip Lookup	<a href="http://petmicrochiplookup.org">petmicrochiplookup.org</a>	Microchip information database; microchip and contact information must be provided by individual, independent pet recovery services
American Heartworm Society Transport Guidelines	<a href="http://heartwormsociety.org/images/ANews/SKO_Transport_Guidelines_for_Web_E.pdf">heartwormsociety.org/images/ANews/SKO_Transport_Guidelines_for_Web_E.pdf</a>	Guidelines for minimizing heartworm transmission in relocated dogs
Animal and Plant Health Inspection Service: Pet Travel	<a href="http://aphis.usda.gov/aphis/pet-travel">aphis.usda.gov/aphis/pet-travel</a>	Links to requirements for pet export and import to and from individual states or countries
Centers for Disease Control and Prevention: International Travel with Your Pet	<a href="http://cdc.gov/features/travelwithpets/index.html">cdc.gov/features/travelwithpets/index.html</a>	Owner-friendly resource with travel tips and links to government regulations
Found Animals Microchip Registry	<a href="http://foundanimals.org/microchip-registry">foundanimals.org/microchip-registry</a>	Independent pet recovery service; user-friendly, free, instant, lifetime registration for any brand of microchip
PetTravel.com	<a href="http://pettravel.com">pettravel.com</a>	Owner-friendly resource for airline policies, import requirements, pet-friendly accommodations, and travel supplies

**TABLE 2**

**COMMON GEOGRAPHIC DISTRIBUTION OF INFECTIOUS AGENTS OF DOGS & CATS IN THE UNITED STATES<sup>8</sup>**

**United States**

**Geographic Region Infectious Agent (Animal Affected)**

<b>Northeast</b>	<i>Anaplasma phagocytophilum</i> * (C, D) <i>Borrelia burgdorferi</i> * (C, D) <i>Cytauxzoon felis</i> (C) <i>Rickettsia rickettsii</i> * (C, D)
<b>Midwest</b>	<i>Anaplasma phagocytophilum</i> * (C, D) <i>Blastomyces dermatitidis</i> * (C, D) <i>Cytauxzoon felis</i> (C) <i>Histoplasma capsulatum</i> * (C, D) <i>Leishmania</i> spp* (C, D) <i>Rickettsia rickettsii</i> * (C, D)
<b>Southeast</b>	<i>Anaplasma phagocytophilum</i> * (C, D) <i>Babesia canis</i> (D) <i>Blastomyces dermatitidis</i> * (C, D) <i>Cytauxzoon felis</i> (C) <i>Ehrlichia</i> spp* (C, D) <i>Hepatozoon</i> spp (C, D) <i>Histoplasma capsulatum</i> * (C, D) <i>Leishmania</i> spp* (C, D) <i>Pythium insidiosum</i> (C, D) <i>Rickettsia rickettsii</i> * (C, D) <i>Trypanosoma cruzi</i> * (C, D)
<b>Northwest</b>	<i>Neorickettsia helminthoeca</i> (D) <i>Rickettsia rickettsii</i> * (C, D)
<b>West</b>	<i>Anaplasma phagocytophilum</i> * (C, D) <i>Rickettsia rickettsii</i> * (C, D) <i>Yersinia pestis</i> * (C, D)
<b>Southwest</b>	<i>Coccidioides immitis</i> * (C, D) <i>Rickettsia rickettsii</i> * (C, D) <i>Trypanosoma cruzi</i> * (C, D) <i>Yersinia pestis</i> * (C, D)

\*Indicates agents with the potential for human impact  
C = cats, D = dogs

Exposure risks include contact with other animals, exposure to natural bodies of water, exposure to vector and reservoir host species, seasonal variations, and zoonotic potential of pathogens that may be encountered (*Table 2*).

Risk-based vaccinations are recommended for dogs in addition to core vaccines; these include “lifestyle” vaccinations against *Bordetella bronchiseptica*, parainfluenza virus, leptospirosis, *Borrelia burgdorferi*, and canine influenza.<sup>9</sup> AAHA offers a lifestyle-based vaccine calculator that facilitates creation of an individualized risk-based vaccination protocol (*Table 1*, previous page). Fewer risk-based vaccination options are available for cats, but cats that travel should be evaluated for supplemental vaccinations against feline leukemia virus, *Chlamydomphila felis*, and *Bordetella bronchiseptica*.<sup>10</sup>

Pet owners should also consider seasonal, emerging, and otherwise timely disease risks when preparing for travel. In 2017, the American Heartworm Society reported increased incidence of canine heartworm disease across the United States and released guidelines for minimizing heartworm disease transmission during travel (*Table 1*, previous page).<sup>11</sup> Heartworm disease remains a year-round threat across the United States, and precautions should be taken to protect animals traveling through endemic areas and animals that might be exposed to infected dogs. In June 2017, canine H3N2 influenza re-emerged in the United States, primarily throughout the southeast and midwestern states.<sup>12</sup> If exposure is likely, vaccination against both H3N2 and H3N8 strains should be considered at least 4 weeks before travel.<sup>9</sup>

**5 Discuss Steps to Protect Behavioral Health & Welfare**

An animal’s behavioral health and welfare must be protected throughout its transport. The Five Freedoms (ie, Freedom from Hunger and Thirst; Freedom from Discomfort; Freedom from Pain, Injury or Disease; Freedom to Express Normal Behavior; Freedom from Fear and Distress)

provide a useful framework for assessing animal welfare during the transport process and can guide individual animal treatment plans.<sup>13</sup> Environmental stressors (eg, temperature extremes, the impact of various modes of transportation), methods for reducing individual animal stress (eg, the use of pheromones, toys and treats, opportunities for exercise and elimination), and acclimation to expected travel conditions (eg, crate training, habituation to car rides) must all be assessed. Use of anxiolytics for individual patients may be considered. Use of sedatives or tranquilizers (eg, acepromazine) is not recommended and may even be prohibited for air travel.<sup>14</sup>

## Conclusion

Clinicians play an important role in ensuring safe

transportation of companion animals. Familiarity with state, federal, and international travel regulations is essential to prevent travel delays and potentially unsafe and inhumane conditions. Companion animals should undergo physical examination prior to transportation, and appropriate treatment should be provided when necessary. Protection against seasonal and/or emerging diseases and prevention of infectious disease transmission should be given special consideration. Microchipping ensures that animals can be identified in the event of loss, and planning ahead for emergencies helps facilitate treatment of unexpected illness or injury. Becoming familiar with the Five Freedoms will help veterinarians counsel clients and humane groups on minimizing an animal's stress during travel and relocation. ■

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