In July 2010, the U.S. Department of Transportation released statistics that showed short-nosed breeds of dogs—such as pugs, Boston Terriers, boxers, mastiffs, Pekingese, Shih tzus and bulldogs—are more likely to die on airplanes than dogs with normal-length muzzles. In fact, over the last 5 years, approximately one-half of the 122 dog deaths associated with airline flights involved these short-faced breeds. 25 of the 122 dogs that died over the 5-year period were English bulldogs, followed by 11 pugs, the only other breed in double digits. Although these numbers seem a bit scary, keep in mind that this is a very small number when compared to the hundreds of thousands of animals that fly every year.

Q. Why are these dog breeds more prone to respiratory problems?

A: Veterinarians have long known that short-nosed – the technical term is brachycephalic – dog breeds are more prone to respiratory problems under normal circumstances, and not just during air travel. You see, brachycephalic breeds are prone to respiratory problems because, although they have shortened noses, they still have to pack all of the same anatomical structures in there that dogs with longer snouts do. Just because their snouts are shorter doesn’t mean they’re missing any parts – they still have to pack nasal passages, sinuses, and a hard palate into that small area. It’s sort of like moving from a house to an apartment and having to put the same amount of furniture in the apartment – it’s all there, but it can be a bit cramped. The situation is worsened if the dog is overweight or obese.

Q: What kinds of respiratory problems can these dog breeds have?

A: As a result of the tighter space, they are prone to problems such as smaller-than-normal nostrils, a longer-than-normal soft palate, and a narrowed trachea (or windpipe). Because of these abnormalities, they don’t breathe as efficiently as dogs with normal-length snouts and can have difficulty cooling off when they’re playing or exercising, or if they’re stressed or overheated. And when they’re stressed, their airway can actually collapse (either partially or completely) and cut off their airflow. It’s like breathing through a straw – if you gently suck through the straw, there’s no problem getting air. But when you really try to suck hard through the straw, similar to what these dogs may do when they’re stressed, exercising or overheating, the straw collapses and you don’t get air. This doesn’t always cause death, but it can cut off their oxygen supply temporarily and cause the dogs to collapse or overheat.

Q. How do these problems put these dog breeds at higher risk during flights?

A: Because of their anatomical abnormalities, short-nosed breeds seem to be more vulnerable to changes in air quality and temperature in the cargo hold of a plane. Although pets are transported in pressurized cargo holds and get much the same air that the passengers in the cabin do, the air circulation might not be ideal for your pet’s individual needs (and remember, your dog is in a crate that could also be affecting ventilation). In addition, remember that there isn’t anyone in that hold area that can
monitor your pet and provide help if needed – so if there’s a problem, you won’t know until the plane has landed and your pet has been unloaded.

**Q: So, what’s a pet owner to do? Should I never fly with a short-nosed pet?**

**A:** We’re not saying you should completely avoid air travel with your pet, even with a short-nosed pet. Knowing there are risks is half the battle, and with proper precautions, you can minimize the risks. If you know you’re going to be traveling with your pet on an airplane, it really helps to prepare ahead of time.

**Q. What can I do to reduce the risks of airline travel for my short-nosed pet?**

**A:** There are many things you can do, including:

- Keep your pet healthy and at a normal weight. Pets with underlying medical conditions may be more likely to have problems during transport. Elderly and obese pets may also be at higher risk.

- Getting your pet used to its traveling crate can really reduce stress while traveling. Think about it…when you’re on a plane, you understand what’s going on while taking off and landing or even when there’s turbulence, but your pet doesn’t know what’s happening, and this can be stressful – and this can add to the stress your pet may already have if it’s in a travel carrier for the first time. If your pet is used to the travel crate, it’s more likely to be comfortable in the crate and travel with less stress. And remember, ALL travel crates, regardless of the breed of dog being transported, need to be secure so your pet can’t escape.

- Although it can be comforting to your pet to have a familiar-smelling item in its travel crate, avoid thick blankets, fluffy towels or cloth items that your pet can wrap itself or bury its nose in – this could increase the risk of respiratory problems. A very thin blanket or flat newspaper is best for lining the crate.

- If your dog is small enough to fit in a pet carrier that fits under the airline seat, and many popular brachycephalic breeds are, you can ask the airline to allow you to bring your pet into the passenger area of the plane with you. Do this when you make your reservation, not when you show up at the airport for your flight. Some airlines will allow this, but you should always ask about the airline’s policy about pets in the passenger cabin.
  - The airline may charge an additional fee for pets in the cabin, and many airlines place limits on the number of pets allowed in the cabin.
  - In addition, airlines may have specific restrictions on the size of carriers allowed in the cabin as well as in the hold.
  - Some airlines may not allow certain breeds of dogs to be transported in the cargo holds of their planes, and airlines such as Continental Airlines also have embargo policies based on the size of the aircraft and the environmental conditions. For example, an airline may refuse to allow short-nosed dogs to be transported in the hold during certain times of the year (due to environmental temperatures) or on certain flights (based on the size of the plane). Most of the embargos apply to animals transported in the hold, and do not apply to pets in the cabin.

- Pick your flight times carefully. When you and your pet are in the air, the pressure and temperature in the plane is controlled. However, you’ve probably noticed that the air seems a little stale and the temperature isn’t as well regulated when you’re sitting on the tarmac – that’s because the plane’s temperature and air pressure controls are often turned down until you’re in the air. What does this mean? Well, it means that if you’re on the tarmac for a long period of time, the temperature in the cargo hold may rise above (if it’s hot) or fall below (if it’s cold) the
ideal temperatures for your pet. To protect pet passengers, airlines have their own temperature restrictions—for example, no pets in the cargo bay when the forecast is 85 degrees (F) or higher—but you can be even more careful.

- Try to minimize layovers where your pet might be kept in the cargo hold or sitting on the tarmac in temperatures that aren’t comfortable for it. For example, in warmer months, or when you’re traveling to a warm destination, only fly earlier or later in the day to avoid the mid-day high temperatures so the cargo area doesn’t get uncomfortably hot. During cold weather, or when flying to a colder destination, try to fly during the warmer parts of the day.

- Visit your veterinarian within 10 days before any interstate trip you take with your pet, but particularly before airplane trips. Pet owners are required by law to get a certificate of veterinary inspection (often called a health certificate) from their veterinarian for any trip that crosses state lines, and the airlines often require a copy of the health certificate before they’ll let your pet fly. If you have a short-nosed breed of dog, ask your veterinarian about your pet’s respiratory health and what precautions you can take to minimize the risks for your pet.

- Your veterinarian can help you figure out what kind and size travel carrier you should get and how best to mark it with your personal information to make sure you and your pet are reunited after the flight, what kind of animal identification is appropriate (such as tags, microchip, etc.), and when you should feed your pet during travel.

- We strongly recommend that you avoid tranquilizing your pet for air travel, because it can increase your pet’s risk of injury and health problems.

**Q. What about short-nosed cat breeds? Are they also at risk?**

**A:** Because they tend to be smaller, most cats travel in carriers in the passenger cabin with their owners, so there are less reported deaths in cats. However, there are short-faced cat breeds, and they may also be prone to more respiratory problems than cats with normal-length faces – so be cautious if your short-faced cat needs to travel in the cargo hold.

*As always, talk to your veterinarian if you have ANY concerns about your pet’s health.*

**Additional resources:**

**AVMA**

Frequently Asked Questions about Traveling with Your Pet

Traveling with Your Pet (brochure)

**U.S. Department of Transportation**

“Short-Faced” Dogs More Prone to Death in Flight, According to DOT Data (Press release, July 16, 2010)

Deceased canines in transit, May 2005-2010 (data tables)