

Emotional support animals on commercial flights: a risk to allergic patients

For the review by Nable and colleagues see *N Engl J Med* 2015; **373**: 939–45. DOI: 10.1056/NEJMra1409213

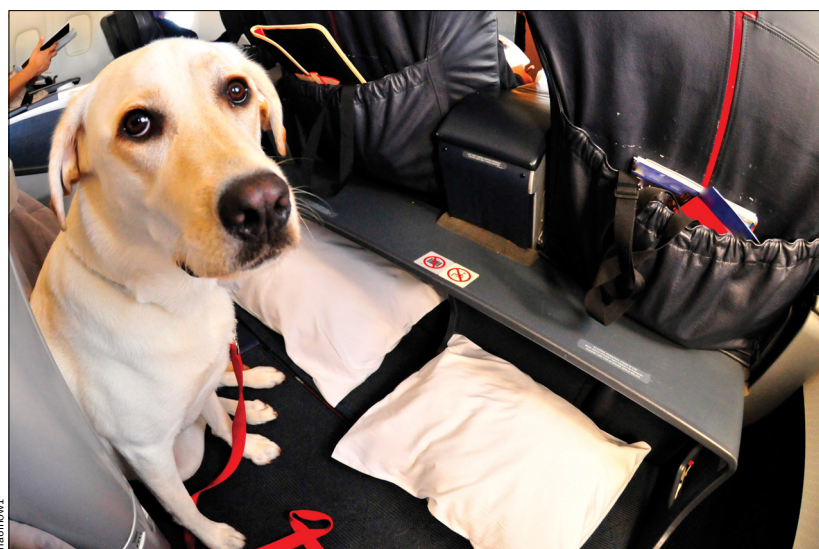
For the study by Peterson and colleagues see *N Engl J Med* 2013; **368**: 2075–83. DOI: 10.1056/NEJMoa1212052

The use of emotional support animals on commercial flights in the USA has increased, and with it, the risk of severe allergic reactions triggered by those animals. One commercial airline (JetBlue) transported more than 25 000 emotional support and service animals in 2014 alone.

Public health concern over allergic reactions to support animals on commercial flights is an issue that has rarely been addressed in the medical literature. Nable and colleagues in their review of in-flight medical emergencies published in the *New England Journal of Medicine* did not mention allergic reactions, including reactions triggered by support animals. Estimating the frequency of these events is challenging because there is no mandatory reporting system for in-flight medical emergencies. Peterson and colleagues did a retrospective study of in-flight medical emergencies and their outcomes reported by five airlines from 2008 to 2010, in which they found that “respiratory symptoms” were the second most common in-flight emergency and “allergic reactions” were another common emergency, but more detailed information was not available in the medical literature. Allergic reactions or asthma exacerbations triggered by emotional support animals are a potentially important, albeit under-reported, issue. Although there is extensive literature exploring the mental health benefits of emotional support animals for their owners, the public health consequences of transporting these animals in airplane cabins and other confined public spaces for passengers and crew with severe allergies have not been explored in any depth.

In 1986, the US Congress passed the Air Carrier Access Act that allowed service animals such as guide dogs for the blind to fly on commercial planes and precluded their removal based on objections from other passengers. Federal regulations extended these protections to emotional support animals provided the passenger has documentation from a mental health provider attesting to the importance of the animal for emotional support in the treatment of a mental health-related disability. Federal regulations not only forbid excluding such animals from the cabin but also forbid compelling any change in the pet's seat assignment making it difficult to accommodate other passengers with allergies by maximising the separation between the animal and the allergic individual. Airlines risk fines of up to US\$150 000 and the possibility of lawsuits if they ask passengers with support animals to accommodate the needs of other passengers. The regulations are written so broadly that unconventional pets such as full-grown turkeys, pot-bellied pigs, hedgehogs, an African spurred tortoise, and even small horses have been allowed on planes as emotional support animals. Unlike conventional pets, these animals are not required to be caged during the flight, and some passengers have complained of being disturbed and even bitten by the animals. The number of complaints to US airlines about emotional support animals has steadily increased from 38 in 2004 to 411 in 2011, the last year for which data were available.

There are certainly potential health benefits encouraging the use of emotional support animals. Studies have demonstrated that these animals can reduce anxiety and lower elevated blood pressure. However, there are other, non-medical incentives that encourage passengers to transport their pets on airlines as designated emotional support animals rather than mere pets. For example, owners of emotional support animals avoid the customary fees charged by airlines for transporting pets. Additionally, most US airlines no longer allow larger pets to fly in the cargo hold because of the risk of injury or death to the animal, so the only option to travel with a large pet is to have the animal designated as an emotional support animal that can be transported in the cabin. It is not surprising that some passengers have abused the privilege of having an emotional support animal. Multiple websites now exist to furnish passengers with letters of medical necessity to designate their pets as emotional support animals. In response, the House of Representatives for the state of Colorado recently passed a bill that criminalises deliberately misrepresenting a pet as a support animal.



The proliferation of emotional support animals on flights has placed people with allergies or asthma at an increased risk to their health. Unfortunately, asthmatics are already at slightly higher risk for respiratory complications on flights due to the quality of the cabin air, which is both dry (10–20% humidity) and less well oxygenated than usual since cabins are typically pressurised to the equivalent of 1.2–2.4 km above sea level. An asthmatic patient of ours with a known severe allergy to dogs forced an emergency landing of a US commercial flight because she developed status asthmaticus triggered by an emotional support dog in the cabin. On a subsequent flight, a physician's note describing her life-threatening allergy was trumped by a competing note arguing for another passenger's need for an emotional support dog, and our patient was forced at the last minute to reschedule her flight. US Federal regulations prevented the airline from compelling a seating change so that the patient with the severe allergy could be seated as far as possible from the emotional support animal.

There is a cogent argument for service animals in the flight cabin, including those for emotional support, but a balance must be struck between the needs of passengers with emotional support animals and those with severe allergies to those animals. Additionally, placing

susceptible passengers in close proximity to emotional support animals that trigger allergic reactions can result in unintended consequences for passengers and airlines that also deserve consideration, such as the inconvenience and financial costs of flight delays and even emergency landings. The US regulation that forces airlines to honour mental health workers' prescriptions for emotional support animals without providing any accommodation for allergic people should be re-examined and reformed. The risk to the allergic person can outweigh the benefits to the animal's owner. In our opinion, a physician note documenting a severe animal allergy should, at a minimum, be sufficient grounds to compel a change in the seating assignment of an emotional support animal to ensure that the animal is situated as far from the allergic patient as possible.

Although there are currently more limitations on emotional support animals in airline cabins in Europe than in the USA, there have been petitions in the UK to liberalise the regulations. Policymakers in Europe would be wise to consider the ramifications for allergic individuals before considering any changes in current restrictions.

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Hope persists for mesothelioma advances despite setbacks

The failure of second-line tremelimumab monotherapy to improve overall survival in patients with mesothelioma, announced by AstraZeneca in February, 2016, was a bitter disappointment for patients and clinicians facing an aggressive disease for which there are few options after standard treatment (chemotherapy, surgery, and radiation) fails, experts told *The Lancet Respiratory Medicine*.

"Every time a trial like this fails it is bad for patients", said Hossein Borghaei, chief of thoracic medical oncology at Fox Chase Cancer Center (Philadelphia, PA, USA). Borghaei added "mesothelioma has not benefited from the development of targeted therapies to date, and it is not a disease where personalised therapies are a reality yet".

"It is unlikely that in a complex solid tumour such as mesothelioma, a single immunotherapy can show survival benefit", said Prasad S Adusumilli (Memorial Sloan-Kettering Cancer Center, New York, NY, USA). "While the full details of the [tremelimumab] study are awaited, the future of 'precision immunotherapy' is dependent upon better understanding mesothelioma tumour immunology and tuning immunotherapy agents to defined patient populations", Adusumilli continued.

But Borghaei is optimistic that there is "still hope" for mesothelioma immunotherapy using other investigational

checkpoint inhibitors, such as anti-programmed cell death protein-1 antibodies, or combinations of different immunotherapy drugs.

Baylor College of Medicine (Houston, TX, USA) is undertaking a single-centre phase 2 clinical trial that

For the phase 2 clinical trial see
<https://clinicaltrials.gov/ct2/show/NCT02592551>

