

Q: Is shipping fever a threat to my horse when travelling?

Journeys in a horsebox go hand in hand with riding horses, but the risk of shipping fever should not be ignored. Imogen Burrows MRCVS reveals all you need to know about this potentially fatal fever

Fearsome fever

What causes shipping fever?

- **DEHYDRATION** compromises the respiratory tract by hindering normal clearance mechanisms. Horses commonly dehydrate during travel, often through overheating under rugs or because of crowded transportation, or because they struggle to access water or fail to drink through stress.
- Sweating as a result of heat or stress will also increase fluid loss.
- Ventilation in transport is variable. Horses are exposed to high levels of respiratory irritants, including dust and fungal spores and moulds in forage and bedding, as well as ammonia and other irritants from urine and faeces. Inhalation of these can result in respiratory inflammation.
- While travelling, the horse's head is often kept elevated. This allows normal bacteria present in the throat to contaminate the lower airway after as little as four hours. Alongside impaired respiratory clearance and inflammation, respiratory infection can occur within eight hours.
- Although these factors are the most significant in the development of shipping fever, obese horses are also more likely to be affected.
- Pre-existing respiratory disease is a significant predisposing factor and any horse with a raised temperature or underlying illness has a higher risk of developing problems.
- Strenuous exercise results in low-grade contamination of the lower respiratory tract, by aspiration of particles and pathogens from the increased movement of air through the airways. In addition to this, inflammatory cells within the lungs become less effective.
- There are many risk factors involved, however exactly what deleterious effects they each have on the respiratory tract is hard to know.

A chest drain fitted to draw out pus in a shipping fever case. This horse produced five buckets of pus

DUE to its somewhat indiscriminate nature, shipping fever can be tricky to prevent — and identify. Tina Cook's 2014 World Equestrian Games partner De Novo News fell ill on his return from competing in Poland last year, despite being given frequent rest breaks to drink and to lower his head to clear any discharge. The other two horses on the lorry showed no ill effects but, tragically, De Novo News' illness ultimately led to his untimely death.

Of seven racehorses returning to Jeremy Scott's Somerset yard from Ayr Racecourse in 2010, Scottish Grand National runner-up Gone To Lunch was the only one to contract shipping fever. He showed subtle signs of illness once back at the yard. Initial lethargy and a temperature soon developed into an infection, which hospitalised him

Hard to treat: an X-ray shows diffuse pneumonia and, in the white semicircle area, a lung abscess

for a month.

After an apparent recovery, the gelding quickly relapsed and became seriously ill. "Everything was shutting down — his legs were filled and his heart wasn't right," says Jeremy's wife Camilla.

His owners and stable staff said their goodbyes, but miraculously, Gone To Lunch pulled through — and made a successful comeback the following spring.

"He fought so hard," adds Camilla, who credits vet Simon White and his wife Polly Curling for their part in saving the horse's life. "Shipping fever can catch you out, because it looks initially as if the horse is just a bit stiff and tired. It's vital to monitor a horse's temperature on his return."

What is shipping fever?

SHIPPING FEVER is the common term for non-contagious bacterial pleuropneumonia associated with travel. It is an infection involving the horse's lungs and the fluid-filled pleural cavities surrounding them. Journeys of more than 10 hours represent an increased risk, but pneumonia has been diagnosed in horses who have travelled for lesser time periods or not at all.

As travel has become simpler and more commonplace, the incidence of shipping fever may have increased but accurate figures are hard to find. It's clear that an understanding of this disease is critical for anyone transporting horses abroad or on lengthy domestic journeys.

What are the signs?

SIGNS of infection include depression, lack of appetite, lethargy, fever, cough and nasal discharge, but can be subtle in the early stages.

Large volumes of fluid accumulate within the chest cavity, causing respiratory distress, and horses may reflect pain by colicking. Abscesses may then form within the lung tissue, which are very difficult to treat. Rarely, infection can seed in other areas of the body. Affected horses can develop fatal complications, such as severe laminitis.

How quickly does it occur?

ALTHOUGH most cases of shipping

Right: world silver medalist De Novo News died after more than three months battling shipping fever

DID YOU KNOW?

- After 24 hours of travel about 10% of horses develop shipping fever.
- After 40 hours of travel incidence increases to 50%.
- 1.4% — the overall prevalence in horses.
- Shipping fever has been observed in 60.5% of horses that travel by air.
- Up to 70% may survive, but as few as 30% regain full athletic performance.

fever will occur within 24 hours of travel, pneumonia can occur up to 14 days afterwards. About 11% of horses develop a transient fever in the first 24 hours, which resolves without specific treatment.

Fever lasting more than 24 hours after arrival, however, or alongside other signs of respiratory disease, should be investigated. While shipping fever would be likely, other respiratory diseases should be considered. Equine influenza, equine herpes virus, strangles and, where relevant, exotic disease need to be ruled out.

How should I act?

TAKING temperatures twice daily for three days after travel is recommended, because identifying respiratory disease early is critical to a successful outcome.

If disease is evident, travel should cease unless needed for veterinary care. The horse should be rested and urgent veterinary attention sought. Delayed treatment is associated with a poor outcome. **H&H**

Six ways to help prevent shipping fever

1 **STRESS** levels vary greatly between horses, so identifying individual preferences for watering and feeding, as well as travelling position, is important.

2 Where possible, elect to travel during cooler, less humid times to reduce overheating. Environmental temperatures increase significantly when several horses are transported together (below), so horses need to be rugged only lightly.

3 Ensure that vehicles used for long distances are well ventilated and use low-dust forage and bedding.

4 Horses should be allowed to lower their heads as often as possible during travel — it is suggested that four hours' head up requires one hour's head down for respiratory function to return to normal.

5 Provide dust-free forage and water during travel, where practical, and offer free access to both immediately after unloading.

6 Long-distance travel cannot be avoided for the advanced equine athlete, and regulations are difficult to enforce. Ensuring that horses are healthy prior to departure is critical to minimise risks of disease. Regular health checks, temperature monitoring and early recognition of any problems — in the run-up to, during and following long-distance travel — are imperative.



ABOUT THE AUTHOR

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