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Three Types of Respiratory Disease

The American College of Veterinary Internal Medicine (ACVIM) website defines internal medicine as a field focused on organ systems and their problems. What it really entails is analyzing problems specific to the organ systems, which can be split into three categories: gastrointestinal problems, neurologic system issues, and respiratory diseases.

Here we'll explore the latter, which are acute in nature and as common as colds in humans. In horses respiratory diseases can be broken down into the following three categories.

Equine Asthma, or 'Heaves'

Most performance horses are impeccably cared for, which reduces their chances of developing chronic respiratory or significant lung conditions. As a result, the respiratory issue we most commonly see in this population is equine asthma, previously known as heaves.

This noninfectious condition is very similar to asthma in humans. Reacting to triggers in the environment, the small airway constricts with inflammation and restricts air flow. As a result, a horse might perform as a top athlete one minute, and experience real exercise limitations an hour, a day, or a week later. Here in South Florida, for example, horses can react to the inherent moist air, dander, dust, and pollen, making equine asthma by far the most common respiratory problem in our horses. It's also the most treatable.

Veterinarians can treat equine asthma using a combination of nebulized, oral, or injected medications. These serve to quiet the inflammatory response, much like how an inhaler helps relieve a human's asthma symptoms.

Acute Infections

Viral respiratory diseases include influenza and rhinopneumonitis, or rhino, caused by one of two types of



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equine herpesviruses (EHV): EHV-1 and EHV-4. These infectious diseases are quite common; study results indicate that as many as 95% of adult horses have already been infected and have strong immunity against them. In most cases, these infections cause a minor "snotty" nose and remain dormant throughout the horse's life. Vaccinating is the easiest way to prevent cases of flu and rhino. Because these infections spread so readily, proper biosecurity protocols (see the American Association of Equine Practitioners' guidelines at goo.gl/E9hXwj) must go hand in hand with vaccination. Isolation is also key when it comes to preventing spread. At Palm Beach Equine Clinic, for instance, we designed our isolation stalls with individual filtered airflow systems to prevent exposure via contaminated air.

Shipping Fever

The most severe kind of respiratory disease found in horses is shipping fever, which is an infection that takes advantage of a horse's stress while traveling and the resulting immune system compromise. This condition is not readily transmitted to other horses.

No amount of dollar or expertise can save the sickest of these horses, so those are the ones we really worry about. Whether a horse gets exposed to a pathogen or inadvertently aspirates food into the trachea while traveling, the result can be a deep bacterial infection.

While treatable, these infections require two to three or more months on antibiotics that transition from injectable to oral.

Preventing Spread

Veterinarians, technicians, and anyone in contact with a contagious horse can best mitigate risk of respiratory disease spread by taking every available biosecurity precaution, including using foot baths before entering and upon exiting stalls and wearing Tyvek suits, gowns, and masks for multiple layers of protection. These precautions also reduce much of the owner's and veterinarian's anxiety about disease spreading from one patient to another. While the end goal is to have a healthy horse, almost as important when treating respiratory disease in horses is making potential transmission a nonfactor. 🐾

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