

Equine Asthma

Horses in our community take part in a variety of different activities, whether it be barrel racing, jumping, dressage, trail riding or racing. What do all of these have in common? They require the horse to be able to breathe effectively. If the horse's respiratory system is compromised, they may pull up early in a race or turn barrels poorly, leading to poor performance. To keep our horses performing at their best, while enjoying it, we need to ensure their lungs are healthy.

Dry, windy conditions with many days of poor air quality this year have increased the number of horses experiencing asthma. Have you noticed your horse coughing while you are riding? Has your horse been breathing more heavily? Do you notice your horses' nostrils flaring more often? These may be early signs of equine asthma.

Equine asthma, previously known as 'heaves', is caused by a hypersensitivity reaction in the horses lungs caused by allergens such as dust and mould. Asthma is often more commonly reported by owners in older horses, but young horses can also be affected.

Knowing the signs of equine asthma and being able to identify them early is an important way to keep your horse's lungs healthy. Earlier environmental management and treatment can help to prevent irreversible damage to the lungs that can occur in chronic, severe asthma cases. What do you need to be on the lookout for? Early signs of equine asthma can include the following:

- Coughing while exercising
- Nostril flaring
- Nasal discharge
- Increased movement of the abdomen while breathing

More severely affected horses will also cough during their normal daily routine, such as while they are eating. A 'heave line' may also occur in more severe cases due to the increased use of the horse's respiratory muscles.

If you notice any of these signs in your horse their respiratory system should be evaluated by a veterinarian. A veterinarian will evaluate your horse's lungs by listening with a stethoscope to determine if there are any abnormal sounds. You may hear your veterinarian talking about crackles and wheezes. These are abnormal sounds heard within the lungs that can indicate the lower airways are constricted and may contain increased levels of fluid. The next step to diagnose equine asthma is to use a small camera (endoscope) that is passed up the horse's nose to evaluate the airways. Horses with asthma often have increased levels of mucous present in the trachea. Your veterinarian may also recommend a bronchoalveolar lavage, or BAL. This is a procedure allowing a sample of cells to be collected from the lower airways. These samples are evaluated under a microscope to count the number of different cells present and based on these results your veterinarian will be able to determine if your horse has asthma.

Your horse has been diagnosed with asthma, what's next?

Modifying the horses' environment to reduce dust and mould is the most important part of treating horses with asthma. Without this step, medications are not very effective. Unfortunately, there are parts of the environment that we cannot control such as poor air quality due to smoke

from forest fires or very warm days with high levels of humidity. However, there are many aspects we can control. Here are some helpful ways to reduce exposure to potential allergens, such as dust:

- Ensure your feed is low in dust. This may require you to soak or wet down hay before it is fed. Some severe cases require feeding hay cubes or pellets as an alternative to hay. If using a round bale, the hay should be forked off the bale before feeding it.
- Keep your horse in a well-ventilated area. Many asthmatic horses are more comfortable outside but well-ventilated barns with low dust and ammonia levels provide good housing for these horses as well.
- Ensure there is no mouldy hay being fed or stored near where horses are living.
- Keep dust levels down in the barn. For example, wait to sweep the aisle until horses have been turned out.

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In some asthma cases medications are required as additional treatment. The most common medications used for treating asthma include a bronchodilator to open the airways and a corticosteroid to reduce inflammation. These medications can be administered orally or through an inhaler. Using inhaled medications allows the products to be delivered directly to the lungs. Inhalers also provide a way to avoid oral administration of corticosteroids to horses that are prone to laminitis, such as those with Cushings or Equine Metabolic Syndrome. The severity of clinical signs, findings on physical examination and results of the BAL sample are all important aspects to help your veterinarian create the best treatment plan for your horse.

Now that you have the tools to identify potential asthma cases you can work together with your veterinarian to diagnose, treat, and manage your horse in order to keep their lungs healthy.

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