



# Inhaler Use for Horses

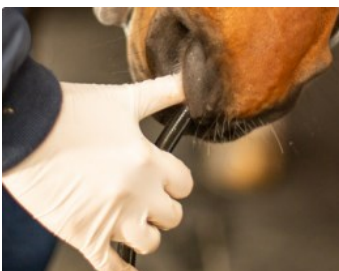
### Why does my horse need an inhaler or nebuliser?

If your horse has been diagnosed with equine asthma, previously known as Respiratory Airway Obstruction (RAO), Chronic Obstructive Pulmonary Disorder (COPD), Summer Pasture Associated Recurrent Airway Obstruction (SPA) or Inflammatory Airway Disease (IAD), your vet may advise using an inhaler to deliver the most appropriate drug directly to the respiratory system. This can reduce the total dose needed, and the effects on the rest of the body – thus reducing potential side effects.



### What is equine asthma and how is it diagnosed?

Current research states that asthma is as a result of lung hypersensitivity to inhaled antigens causing both allergic and inflammatory responses. The exact cause is still not confirmed, but the most common triggers are mould, dust and endotoxins in hay and straw. This disease affects any type of horse, of any gender, and most commonly is seen in 9–12 year olds. There is likely a heritable component of this condition. Diagnosis is often made based on the clinical signs and history but occasionally further tests are needed for confirmation. Endoscopy may be used to visualise the upper respiratory tract and trachea, and samples can be taken from deeper in the lungs for microscopic analysis.



### What drug types can be delivered via inhalers?

- Glucocorticoids—the most commonly used drugs to suppress inflammation and mucus production e.g. beclomethasone, fluticasone, ciclesonide.
- Bronchodilators -encourage widening of airways and can be used prior to other drugs aiding delivery to deep structures e.g. salbutamol, ipratropium bromide.
- Inflammatory cell stabilising agents can be used to try and prevent asthma e.g. sodium cromoglycate.

### How do I give the inhaled drug?

There is a licensed equine inhaler: the Aservo Equihaler. Other options include use of nebulisers or inhalers with a spacer device.



# Kings Bounty Equine Practice Client Fact Sheet

## Steps to ensure effective therapeutic use of inhaler and spacer device:

- Warm the inhaler to body temperature before use
- Shake the inhaler for 30 seconds
- Remove the cap from the inhaler
- Waste the first spray if it hasn't been used for more than 12 hours
- Attach the inhaler to the spacer device – ensure that the inhaler is vertical
- Ensure the mask is firmly in position with an airtight seal between it and the spacer
- Watch the horse's breathing pattern for a few breaths (this is often easiest if you monitor the valve movement on the spacer) and actuate the inhaler once before, or immediately after the horse inspires.
- Allow a full inward breath to take in all of the spray
- If possible obstruct both nostrils after inspiration to enforce breath-holding for 5-10 seconds, and then allow the horse to breathe normally
- Wait at least 30 seconds before shaking the inhaler again and giving the next spray
- Record the number of doses used, to know when the inhaler is empty, as it will continue to sound like it is giving the drug. Most inhalers contain 120 sprays
- The spacer should be washed weekly in detergent – but DON'T rinse with water afterwards, instead your device should be left to drip dry.

## Dietary and environmental management of equine asthma

Managing these cases is a life-long commitment to reduce the triggers for your individual horse.

This may include:

- Using dust-free bedding e.g. paper
- Soaking hay or feeding haylage
- Not storing hay, straw or the muck heap near affected horses
- Only turning out at specific times of the year and into specific fields, in cases of summer associated asthma.



Despite asthma being a chronic condition that will require life-long management and possibly treatment, many horses can continue being ridden to the same level.