

# MANAGEMENT ADVICE FOR RAO CASES

Horses and ponies diagnosed with RAO (Recurrent Airway Obstruction), formerly known as COPD, heaves or dust allergy are highly susceptible to the effects of inhaling allergens from their environment. The hallmarks of the disease are similar to human asthma and the symptoms can range from exercise intolerance or reduced performance and occasional coughing to wheezing and respiratory distress.

## INITIAL TREATMENT

Your vet may prescribe medications initially to treat the inflammation in the lungs and to relieve symptoms such as coughing, wheezing and nasal discharge. These will help to get the disease under control initially, but the key to long-term lung health is reducing the animal's exposure to inhaled particles which cause lung inflammation. These include: mould spores; bacterial toxins; dust particles and ammonia. All animals will benefit from a cleaner air space but for RAO affected animals it is critical to prevent distressing and long-term symptoms.

Most horses with RAO are sensitive to inhaled allergens that they are exposed to inside the stable. However, some patients have a particular form of the disease: SPARAO (summer pasture associated RAO) which is at its worst in the summer months at pasture and has been attributed to sensitivity to pollens and grasses. These animals require different management. Consult your veterinary surgeon for further information.

## TURNOUT

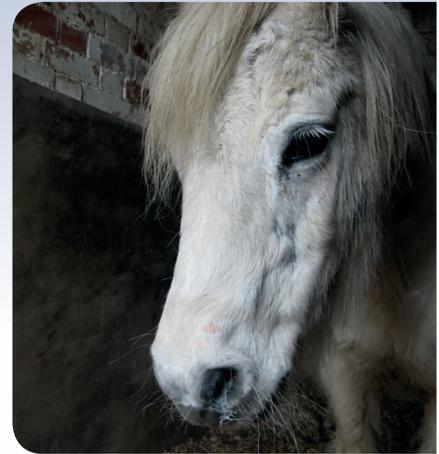
The best place for a horse or pony with RAO is outside! Complete paddock turnout in the absence of forage or bedding should be the aim of managing these patients. If you can find premises with all year turnout, this is likely to be the most cost effective way to keep your

horse's or pony's lungs healthy. Beware of forage fed outside and field shelters with straw bedding as even short periods of time spent in these areas can undo the benefits gained from this type of management.

In situations where this management system is not possible or practical, there are several measures that you can take to reduce the quantity of allergens that your horse inhales when stabled.

## FORAGE AND FEEDING

Dry hay, even when of good quality contains large amounts of mould spores and bacterial toxins which can be inhaled and cause an inflammatory response. Replacing the hay portion of the diet with commercially sealed haylage or chopped forage replacer can be beneficial but may not be nutritionally suitable. Soaking hay by immersing it completely in water has been shown to reduce the amount of particles that can be inhaled. Soaking for several hours does not necessarily confer further reductions and can lead to the leaching of nutrition from the forage; therefore, soaking for up to 30 minutes is likely to be sufficient. Steaming hay in a commercial steamer has also shown to achieve this aim; beware of home-made steamers as they can actually encourage the growth of bacteria in the hay. Feed from the floor rather than raised in a net or a rack to prevent more dust and debris falling into the patient's airspace.



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## BEDDING

Straw cannot be recommended for horses and ponies with RAO. Rubber matting reduces the total amount of bedding required and shredded paper, cardboard and dust-extracted wood shavings have been shown to be low dust options. Frequently removing wet bedding from the stable has been shown to be beneficial – urine soaked stables are breeding grounds for bugs and produce higher volumes of ammonia. Make sure your horse is not in the stable when you are mucking out his or his neighbour's stable as moving around bedding and waste causes a surge in the number of allergens in his airspace.

## BUILDINGS

Many equine stables have poor ventilation. Evidence of this can be found in the accumulation of dust on surfaces within the stables. Try to open up roof and window ventilation and avoid storing hay and straw near to the affected patient. Keep buildings clean and disinfect regularly with a proprietary product to reduce mould and bacterial build-up, following the manufacturer's instructions. If the stable shares an airspace with others, as found in a barn layout, improving the air quality in only the affected horse's stable will still confer some improvements. However, the best results will be obtained from applying the same changes to all stables sharing an airspace.



## EXERCISE

Exercise, if the patient can manage it comfortably, should be encouraged as it promotes the movement of airway mucus and improves the circulation of blood to the lungs.

## CHECKLIST

### Turnout

- ✓ Maximise turnout
- ✓ No dry forage at pasture
- ✓ No straw bedding in shelters

### Forage

- ✓ Soak hay for up to 30 minutes/use a commercial steamer
- ✓ Commercially packed haylage if suitable
- ✓ Feed from floor

### Bedding

- ✓ Rubber matting
- ✓ Paper, cardboard or dust-free wood shavings
- ✓ Remove wet bedding
- ✓ Don't muck out while horse is in stable

### Buildings

- ✓ Maximise ventilation
- ✓ Remove hay/straw storage
- ✓ Keep surfaces clean and dust free
- ✓ Apply changes to all stables in airspace

### Exercise

- ✓ Regular exercise if horse can tolerate it
- ✓ Check with your vet first