Defend Against Dust!

Equine Asthma or “heaves” can cause exercise intolerance, difficulty expelling air, inflammation of lung epithelium and narrowing of Bronchus, persistent cough and nasal secretions from mucous production. All of the above can turn a riding horse into a pasture ornament and or in worst case scenarios, bring about important quality of life decisions. Don’t wait for these signs or a tell-tale heave line to appear before taking steps in your barn management to reduce dust, mould and particulates in your horse’s environment.

Hay and bedding are two of the top sources of mould and particulate in a horse's environment.

**Hay:**

- Purchase hay that has been tested for quality. [It will also help stretch your feed dollar!](#)
- Store hay on pallets (to reduce moisture from ground), in a separate building, away from the barn (not in your indoor riding arena). This has the added benefit of a fire prevention measure as well as dust reduction in the horse’s environment.
- Hay should be sufficiently dried before storing and monitored for moisture content. Storing damp hay provides an environment of moisture and heat for mould to thrive and multiply. It also creates a fire hazard.
- **Visual evaluation** is important (video) but not all mould and particulate can be detected with the naked eye. You can request a test for mould contamination on your hay.
- Feed from the ground when possible. If you use a hay net, wet it down just before hanging it.
- **Round bales are not recommended.** Horses that spend their day buried neck deep in a round bale are inhaling a copious amount of mould, mycotoxins and dust. [This can double the risk of developing equine asthma.](#)
- Consider wetting or steaming hay or hay alternatives (i.e. hay pellets, cubes or haylage) if the horse’s breathing is negatively affected by the hay in its diet. Research has been conducted on [steamed hay vs soaked](#) and the variable nutrient losses to consider.

**In the Barn (bedding and more):**

- Consider wood shavings over straw. Always choose low dust, absorbent, bedding.
- Turn horses out before mucking stalls.
In the Barn (con’td):

- Keep ammonia smells at bay with daily stall cleaning and control products if needed. If you smell it, this gas is at a level which can put your horse’s airways at risk.
- Proper drainage and the use of a non-porous floor reduces odour retention.
- Keep windows and doors open to improve air flow and ventilation.
- Ventilation is a primary concern when building a barn but many stables are lacking. A combination of inlets (i.e. vents) and outlets (i.e. cupolas) help provide ventilation especially once barn windows and doors are closed up to provide warmth in the winter.
- Mechanical ventilation is another consideration (i.e. ceiling fans, exhaust fans).
- For stable design consider bars on the fronts of stalls instead of all board sides so there can be better airflow through the stall.
- Proper insulation helps avoid condensation problems and damp conditions.
- Do not sweep dust and debris from the barn aisle into your horse’s stall; in fact, don’t sweep at all when horses are in the barn. Wet down the floor before you begin and wear a mask for your own respiratory health.

In the Arena:

- Choose footing wisely and replace or partially replace when needed. Fine smooth particles are more prone to suspension than heavier angular particles.
- Footing in the arena needs to be regularly maintained to remain moist, keeping dust from rising into the air.
- Additives and environmentally friendly oils help bind particles and slow evaporation.

Always:

Keep horses outside as much as possible, unless medical conditions require stalling or the horse has an equine asthma issue associated with the pasture. If your horse begins to cough, call the vet right away to investigate the cause. When dealing with respiratory ailments early diagnostics, aggressive treatment and environmental management are of paramount importance.

Check out management “do’s” and “don’ts” in this helpful infographic shared by Equine Guelph’s sponsor, Boehringer Ingelheim.

Another Equine Guelph fact sheet also provides a trip through the respiratory system.

Learn more about maintaining a healthy environment for your horse with the next online offering of Equine Guelph’s Management of the Equine Environment course.