

# CARING FOR YOUR HORSES

## Take a Deep Breath: How Respiratory Therapy with Chelated Silver is Helping Horses Breathe Easier

BY CYNTHIA MCFARLAND  
TRACK Magazine Correspondent

A horse can have the best bloodlines, ideal conformation, and all the athletic potential in the world, but if he can't breathe, he can't run. At least not for long.

"A major limiting factor in equine performance is low grade respiratory tract infections," observes Thomas Tobin, MVB (DVM), MSC, PhD, MRCVS, a toxicologist, pharmacologist and veterinarian based in Lexington, Kentucky.

Unfortunately, equine respiratory problems seem to be on the rise. The reasons are varied and can overlap. When they aren't working, racehorses and other performance horses generally spend the bulk of their day in a stall. The barn environment is often a prime source of irritation to the equine respiratory system, thanks to the prevalence of dust, hay, and bedding in an enclosed area.

"Respiratory problems are common and have increased in recent years. The most common issue I see is upper respiratory system congestion with nasal discharge," notes Mickey Ballew, an equine respiratory therapist in Louisville, Kentucky. "Bloodlines may contribute to some of these problems, but stabled horses seem to have more issues than pastured horses, so I think environment is a huge contributor to these problems."

Ballew has worked on hundreds of horses, many of which compete at the top level. He's found that many horses with respiratory issues have viral lung infections. They may be treated with antibiotics, but these medications, although effective on fungal and bacterial infections, can't cure viral infections.

"Respiratory ailments are becoming more and more of an issue. Anywhere you go at equine competitions, you'll see respiratory problems. Whether you're at the racetrack, a barrel race or a cutting, you'll hear horses coughing," says Tonda Collins, owner of Equi-Resp ([www.equiresp.com](http://www.equiresp.com)), a Blanchard, Oklahoma-based company dedicated to treating equine respiratory issues.

"The way we feed horses from elevated feeders, keep them in stalls, and even the way we trailer horses with their heads tied up, all contribute to respiratory problems. A lot of people put shavings in their trailer when traveling and at an event, and these are often cheap, dusty shavings," adds Collins, a life-long horse owner who has worked in the animal health field for 15 years.

Horses with respiratory woes are often dealing with at least two issues: inflammation due to the presence of micro-

organisms and excessive amounts of mucus. Both Ballew and Collins have seen tremendous improvement by treating these horses with chelated silver.

Ballew, who owns EquiSilver LLC ([www.equisilver.com](http://www.equisilver.com)), has been conducting respiratory therapy on his equine clients using a nebulizer and EquiSilver™ Chelated Silver Solution since 2004. The product's formulation was developed after decades of silver research by Kentucky-based trainer and veterinarian Mike Cavey, DVM.

### SILVER LINING

Turns out, the therapeutic benefits of silver are nothing new. The early Greek physician Hippocrates wrote about silver's healing and anti-infective properties many centuries ago.

"Silver compounds were used to prevent infections during WWI, and were widely used right up to the introduction of antibiotics prior to and during WWII," adds Ballew.

"Chelated silver therapy is currently being used successfully as a treatment in cases of pharyngitis, lymphoid hyperplasia, chronic obstructive pulmonary disease (COPD), exercise-induced pulmonary hemorrhage (EIPH or "bleeding"), and for a number of other respiratory conditions," he notes. "Delivering a high volume of very small chelated silver particles into the back of the throat, the guttural pouches, the trachea and the large airways of the lungs has proven to be a very beneficial approach."

"Silver inhalation eliminates infections in the respiratory tract by generating reactive oxygen species and is active against all types of microorganisms, bacteria, fungi and viruses. This translates into improved performance and meets the criteria for therapeutic medication," explains Tobin.

Ballew points out that field and clinical testing has shown that using chelated silver as a head wash, or administering it by nebulization, can be highly effective for treating upper and lower respiratory infections. He's seen the treatment completely eradicate such infections in as short as three to five days.

"If there is a bacterial or fungal infection in the lungs, antibiotics can be added to the silver," he says.



EquiSilver

## TREATING THE RESPIRATORY SYSTEM

You may have heard of “colloidal silver,” but Ballew says there’s a significant difference between the colloidal form and chelated silver, which he’s found far more effective.

“Mineral salts or compounds are converted into colloidal form, either by grinding or rapid crystallization,” he explains. “Most colloidal substances are poorly bioavailable, since the colloidal particles, small as they are, are nevertheless far too large to be intestinally absorbed whole. Nearly all of the active ingredients are trapped in the interior of the particles, where they cannot come into contact with the transport channels in the cells.”

Because of this, colloidal silver products may be best suited for topical application, and have proven very effective in treatment of surface wounds and burns.

Chelated silver, on the other hand, is far better able to penetrate cell walls, the bloodstream and body tissues. Using a silver solution with a nebulizer allows saturated silver vapor to be delivered deep into the lungs and respiratory system. The chelated silver ions cause no harm to the animal’s cells, but attach themselves to any infectious microorganisms present, including many antibiotic-resistant super pathogens. This action prevents the uptake of oxygen by the microorganisms, which kills them within about five minutes. Interestingly, it’s been shown that these microorganisms don’t develop resistance to the chelated silver solution, as can happen with antibiotics.

“There’s a mucus membrane over the lungs and it’s hard to penetrate, so that’s why the chelated silver works,” says Ballew. “Colloidal silver doesn’t maintain its integrity like chelated silver does throughout the entire process, and chelated silver works at the cellular level.”



Equi-Resp photo

**Administering chelated silver by nebulization can be effective for treating upper and lower respiratory infections.**

While respiratory therapy for horses might sound “high tech,” it’s very similar to treatments that have been used for years to treat people suffering from asthma and COPD.

Collins has recently developed a new one-piece transparent mask for delivery of chelated silver products. The mask has a patent pending and is being marketed through her business, Equi-Resp.

“I took the idea from an anesthesia mask. It attaches around the horse’s face like a muzzle and can be positioned precisely so the nebulized product goes directly into the horse’s nostrils and on to the lungs. There’s a flow meter to show how much pressure is being used; greater PSI forces the treatment deep into the lungs,” she notes.

“People are excited about a product that will help with bleeders and COPD,” says Collins. “By opening up the horse’s breathing capability, he will be able to run better.”

In many cases, respiratory treatment with chelated silver has been shown to shorten the duration of bronchitis, viruses and colds, which enables the horse to return to training and competition more quickly.

With all the concern about banned substances, horse owners will be relieved to know chelated silver treatments are being safely used at racetracks, equine clinics and performance horse barns across the country.

“It’s a 100% natural product that is completely non-invasive and therapeutic. In several states I’m allowed to do treatments on race day,” says Ballew. “When a horse is getting ready for competition, I’ll often do three treatments in four days, starting four days out from the event, just to make sure the respiratory system is clean and open. It can’t make a horse run faster than he can naturally run, so it’s not a performance enhancer, but it can allow the respiratory system to operate at maximum capacity.

“I do a lot of pre-race treatments to ‘clean out’ horses we know are bleeders. I’ve worked with a tremendous amount of veterinarians. They get the opportunity to scope the horses before and then after treatment, and often find the silver is doing great things for the horses.”

Ballew says many owners and trainers are now looking at respiratory therapy with chelated silver as both a remedy and a preventative measure.

“I’m a true believer in preventative maintenance,” he remarks. “With a horse, you don’t know they’re sick until it’s too late. I do a lot of horses on a weekly basis, or twice weekly, especially horses that are known to have bad allergies. You can’t do it too much. I’ve done some horses as much as seven times in 10 days when they’re getting ready for a major race.”

It’s worth noting that EquiSilver’s chelated silver solution doesn’t interact or interfere with medicine being given to the horse, nor does it effect beneficial enzymes.

Medicine has certainly changed over the years, but no doubt Hippocrates would be pleased to know that modern horsemen are using a new twist on an ancient concept to improve the health and comfort of their animals.

