

Managing the Racehorse's Respiratory Environment By Heather Smith Thomas

Bill Casner, a longtime horseman in Flower Mound Texas, has owned and trained racehorses for many years, starting his career on the track as a young person in 1963. For many years he was co-owner of WinStar Farms in Kentucky. Casner has always tried to be proactive in taking good care of his horses and providing optimum opportunity for them to grow up sound and strong, and to be able to compete at their best ability. Part of having a healthy, sound athlete is a strong respiratory system. This is the only way the horse can be able to run at peak performance without respiratory impairment or bleeding.

“We have reduced our bleeding down to less than 5%, probably closer to 3%. It is so rare now for us to have a horse bleed during a race. We do this by managing these horses without bute (which acts as a blood thinner and can make horses more prone to bleeding) and without Lasix. We also try to manage the respiratory environment these horses live in,” Casner explains.

“Inflammatory airway disease is another reason some horses bleed. Guttural pouch problems, inflamed throats, any number of things can impair breathing. In a stall, these horses are living in filthy environments. The barn is dusty and these stalls have had horses in them for decades. They are full of microbes and pathogens,” he says.

“In our barns we use a novel way to reduce these pathogens, spraying the stalls with an antimicrobial called Ceragyn Stall Disinfectant. This product was created at the University of Utah and is a phenomenal antimicrobial that is totally nontoxic. We fog our stalls with this twice a week at the racetrack and in the barn at my ranch here in Texas. This has helped reduce our horses' respiratory problems dramatically,” says Casner.

“We power-wash the stalls, disinfecting them with Clorox before we put horses into them at the racetrack, and clean them as thoroughly as possible—removing all the dirt and dust. After the horses are in the stalls, we fog those stalls twice a week. With this product you can even fog the hay and grain (it doesn't have to be removed first); you don't have to worry about any negative effects. There's 20 years of study on this product and there is absolutely no toxicity to humans or horses,” he explains.

“To demonstrate how effective this is for managing inflammatory airway disease, this year is our 5th crop of horses that I've brought to Texas from Kentucky, and they've stayed healthier since we started using it. I bring my weanlings from Kentucky to Texas about the first of December to get them out of that cold Kentucky weather. We have a program here to develop the yearlings; we start putting them on the vibration plate in February to strengthen bone, and start swimming them in May—to prepare them to become strong athletes—before we ever start the breaking process,” he says.

“The first two years that I brought my weanlings to Texas, we were dealing with coughs and snots and temperatures. We'd take the horses' temps every morning, and one year every one of the group got sick and we were treating them with a nebulizer. They were all coughing, with snotty noses. Conventional wisdom always rationalizes these things as what youngsters have to go through to develop their immunity. I asked Dr. Rob Holland about this. He's probably one of the top vets in the country for respiratory issues

and he has a PhD in microbiology. He is brilliant when it comes to pathogens. I asked him about horse having to go through all this to develop immunity,” says Casner.

“Dr. Holland kind of laughed and told me there are billions of microbes out there that can cause inflammatory airway disease. When a horse develops immunity, it’s only to that one pathogen the horse encountered. There are millions of others—fungi, bacteria and viruses—that can cause problems. Dr. Holland told me that what happens with horses is that they naturally develop immunity as they get older; it’s a part of maturing as their immune systems become stronger and more able to deal with any type of pathogen encountered. It’s just like people. Kids are always sick but as they get older they develop immunity to the standard illnesses,” he says.

“I thought that was interesting when he told me that, and we found that after those first two years—when we started fogging the stalls—it made a huge difference. I’m into my 3rd crop of yearlings since we started that program and have had NO horses with coughs and snots! I still can’t believe how well this works. Before we started fogging stalls, my first question when I’d come into the barn was ‘what are the temps?’ The barn crew would post all the temps on the board and I’d look at that to see which ones had a fever, which ones were coughing or snorting. You walk down through the barn and hear a cough and immediately try to see which horse it is! We still take temps every morning but we haven’t had a temp, cough, or snots in the past three years,” Casner says.

You have to manage the barn environment because stalls are terrible places for horses. “A stall roof keeps in all the dust and ammonia, which is irritating to the lungs. In the horse business people do things because this is the way they were taught, and this is the way it’s always been done.” They don’t question these traditional practices, which include keeping the horses in stalls.

Horses evolved outside, in clean air. “We try to minimize stall time and give our horses as much turnout time as we can. This is not as easy at the racetrack, and that’s why it’s so important to manage the stall environment,” he says.

Many people at the race track use hay nets in stalls, and the horses have to reach up to eat. Not only does dust from the hay fall into their nostrils, but the heads-up position is unhealthy. The tiny hair-like cilia that line the air passages are designed to keep moving in wavelike motions to continually push debris out of the windpipe--toward the nose and throat where it can be coughed out or swallowed rather than going on down into the lungs. Horses need to have their heads down while eating; this is the natural grazing position and the healthiest for the respiratory system.

“But people like the hay nets; they look pretty when you walk down the barn aisle and see all those hay nets. The horses bury their noses in them and have to inhale all that dust. We prefer to have the hay on the ground, on a clean mat. We also cook it. We use a HayGain steamer, which not only eliminates any dust, but also kills all the microbes including mold spores. It makes the hay a lot more palatable and digestible while making it healthier for the horse,” he says.

“If a person can manage the respiratory environment in the barn, the horses will be a lot more healthy. Fogging the stalls is easy (it only takes about 4 minutes to

disinfect the stall) and inexpensive. You can buy a bottle of that stuff for \$75 and it will make 5 gallons--which will last a long time, when you are fogging the stalls," he says.

"If a horse does develop a respiratory issue or scopes with a bit of blood or mucus after a race, we use a nebulizer on them. We use a chelated silver product with it that is an antimicrobial and works very well," Casner says.

Respiratory health is a big issue for equine athletes. Anything a person can do to prevent respiratory illness will pay off.