

The "S" Word

By Tracy Dopko

For the average non-horsey citizen stumbling upon this article, the "S" word probably brings the word S-E-X to mind but, in the horse world, the dreaded "S" word stands for "the word we do not speak of"...*Streptococcus equi* or, more commonly referred to as, Strangles.

Why is this such a dreaded word? Why do horse people feel the need to stay so secretive regarding the subject? Why can't we just be honest? Ah, but then, we're horse people, and everyone knows we're not honest!

In my twenty odd years of being involved with horses, I have thankfully never had the pleasure of seeing Strangles...until this year. I've always been fascinated with how people tend to hide it and won't admit to it.

In my earlier years, I spent many frustrated seasons attending early spring shows and arriving at show stables to suddenly find out there had been a Strangles outbreak at the barn and worrying for weeks after if my horse was going to come down with it or not. Eventually, once I joined the ranks of becoming part of an A circuit barn, the trainer and resident veterinarian always seemed to know when and where it was safe to go, but it was never something that was common knowledge.



I was always boastful that we had never had Strangles but also knew that, someday, the reign would come to an end and it finally did this year. We religiously vaccinated every horse each February and made it a mandatory policy to quarantine all new horses for two weeks upon arrival. Last fall, I ended up venturing away from the stable, which is owned by my mother, and bought my own place to train and work out of and vowed I would keep the same routine as before and hoped to keep the same track record of never having to mention the "S" word.

But, when one of my horses, after having what I thought was just a mild case of the foal snots last week, suddenly went down hill and had a temperature of 104 F, I realized it was Strangles but, at that point, a different "S" word immediately came to mind - but of the four letter variety.

A quick trip to the vet clinic and an x-ray of the horse's guttural pouch confirmed what I didn't want to know...Strangles. I was absolutely heart broken and puzzled as to how "I" could have Strangles. After all, winter was just on it's way out, I had just moved to a new location and the last new horse I had bought was purchased at the end of January. None of my horses were ready or prepared yet to attend any shows. We hadn't been anywhere yet! It just didn't seem possible...until everything pointed to the new horse I had bought in January.

So, now I'm suddenly thrown into the perils of quickly having to learn the signs and symptoms of Strangles and how to treat it as, it was more than likely the rest of my horses at home would end up getting it as they all share pastures together. How embarrassing to be involved with horses for so many years and not even know what signs to look for, other than the characteristic abscess under the jaw that so many people hear about. The fact of the matter is, that infamous abscess under the jaw is not always present, especially at the beginning stages of Strangles.

My current days are filled with twice a day Penicillin shots, taking temperatures and waiting for possible abscesses, which haven't appeared yet. Combine that with three newly acquired ponies that don't like to be caught on the best of days and one that would rather perform difficult "airs above the ground" or turn herself into an equine sling shot rather than receive a shot of Penicillin and you've got yourself some quality time with your equine friends!

The horse I bought in January happened to be carrying the Strangles bacteria and, even after quarantining, the horse was still able to give Strangles to the rest of my horses because it had not been isolated before we purchased it, to make sure the bacteria had run its course. Before buying the horse, it apparently had just been purchased from another farm which we now find out had an outbreak of Strangles. Whether the person I bought the horse from knew better or not, the original seller should have been up front and honest about it as it has now caused a chain reaction to occur.

What most people don't realize is, if you know or think your horse has been exposed to Strangles, they need to be immediately quarantined. They may not come down with any symptoms right away, or at all, but they can pass it on to other horses regardless or be, what's commonly referred to as, "silent shedders". They don't suddenly have to have the classic abscess under the jaw. And, it is more contagious than most people think as it can survive in the environment for weeks or months.

In the end, the reality is that most people will end up getting Strangles cycling through their barn at some point. Some sooner than others, depending on their barn management skills and how much actual "horse traffic" is evident in each particular barn. What makes it so hard to admit and warn others? Why risk putting the burden on other barns and stables and risk spreading the bacteria even further? Why not just own up to it?

My super deal of a horse has now turned into an expensive and well learned lesson. If someone had spoken up and had been honest and concerned about the health and well-being of others, instead of worrying about making a buck, I would have my \$1,000 vet bill (including Penicillin, vaccinations, immune boosters, etc.) still in my pocket, my horses would be happy and healthy and I wouldn't have to be running around my pasture trying to catch those damn ponies!

In the end, Strangles is just another part of the horse world and will always be apart of it, no matter how hard we try. But, why not try and help other horse owners in the process and make everyone aware of it. Why does it have to be the dreaded "S" word?

Do you know the signs and symptoms of Strangles and what to do if you suspect your horse has been exposed to it? Check out our article with veterinarian, Dr. Ryan Penno, on the following page and learn the facts and what you need to know to protect your horse!

The Facts On Strangles

By Dr. Ryan Penno D.V.M.

Strangles is a highly contagious bacterial infection caused by *Streptococcus Equi*. It is not usually fatal, but can cause death either by excessive swelling that compresses the airway (hence the name) or by spread of the infection to other bodily organs besides the lymph nodes of the throat.

Incubation Period:

- Normally 2 to 6 days.
- Some horses may be inapparent carriers.
- Strangles can survive in the environment for 2 to 3 months in proper conditions.
 - studies show that the bacteria can survive on wood for 63 days at 2C
 - another study on glass or wood was found to survive for 48 days of 20C

Typical Symptoms:

Note: These symptoms can also be caused by other disorders. However, contact your vet immediately if you suspect strangles or any infection.

- Onset: mild fever, lethargy, nasal discharge (secous turning to mucopurulent).
- Sore throat and neck. (The horse may not want to eat, and may stand with head and neck extended.)
- Swollen lymph nodes in the throatlatch area, after initial fever and lethargy.
- Difficulty in breathing and signs of distress due to compression of trachea by enlarged lymph nodes in the neck - moderate to severe cases.
- Affected lymph nodes may rupture and discharge a foul smelling pus.
- Pneumonia is a possible complication.
- Possible systemic infection (7-10% of cases, ie. bastard strangles).
- Purpura hemorrhagica - a disorder where the blood vessels leak, characterized by edema (swelling) of the limbs – rare.
- Strangles is sometimes considered to be a disease of foals and young adult horses. Older horses are often immune to strangles due to prior exposure during their youth, or they may display only lethargy and nasal discharge without obvious lymph node swelling (however, these animals can still spread the disease or get Strangles not only through lymph nodes but organ tissue and muscles). Foals over 3 months of age are also susceptible and horses between the ages of 1 to 5 years old are at higher risk.

Note: "Bastard Strangles" is a strangles infection involving lymph nodes elsewhere in the body besides the head and neck. Symptoms will vary depending on which area of the body is affected and prognosis varies on location. Bastard Strangles is serious and has a poor prognosis.

Testing and Diagnosis:

Note: Your vet may utilize other methods of testing than the ones listed below. This is not an inclusive list.

- Bacterial culture verifies the presence of the strangles bacteria, *Streptococcus Equi*.
- The horse shows typical strangles symptoms.
- Radiographs, endoscopy, ultrasound.

Treatment:

Note: Your vet may utilize some or none of the listed treatments. This is not an inclusive list of treatments.

- Antibiotics may be prescribed.
- Careful monitoring of vital signs to detect complications such as bastard strangles or pneumonia.
- Supportive care -- clean water, good food, protection from extreme heat or cold.
- Hot compresses may be applied to abscessed lymph nodes to encourage them to drain.
- Your veterinarian may lance affected lymph nodes.
- Affected horses should be quarantined, and all tack, equipment, stalls, etc. that were used by or around the affected horse(s) should be sterilized with approved compounds. Hand washing is also very important.

Strangles is **highly** contagious, with two modes of transmission:

- direct contact with nasal secretions or a ruptured abscess.
- environmental contamination

Prevention:

- Vaccines are available, but do not provide complete protection.
- Quarantine of all new horses for two weeks.
- Current vaccine of choice is intranasal due to local and systemic immunity.

What to do if your horse has been exposed:

(This is a touchy issue as there are many different opinions. Any questions or concerns you may have should be discussed with your vet.)

- Those affected by the disease should be treated, but not vaccinated
- Horses with no known contact with the disease should be vaccinated immediately
- Horses known to have been in contact should be observed for seven to ten days and vaccinated only if they have a normal temperature and show no clinical signs of the disease

Factors effecting Strangles:

Exposure of a horse to *S. equi* does not necessarily mean that it will come down with strangles. Factors that influence the risk of disease include

- dose of bacteria (poor sanitation and direct contact with nasal secretions and pus increase the chance of disease);
- immune status of horse. Previously exposed horses are often immune to the disease, or do not get as sick as unexposed horses. During the first 0 to 3 months of life, foals are often protected by maternal antibodies. Vaccination can also increase resistance to the disease;
- stress (poor nutrition, overcrowding, lengthy transportation or pre-existing diseases increase the risk of strangles).

Bacteria can be transmitted through contact with pus or nasal discharges from an infected horse, or from contaminated bedding or barn equipment (water troughs, buckets, etc.). If you think your horse may have strangles, contact your veterinarian for medical advice and to determine an appropriate course of treatment. This document is NOT intended to provide medical advice, but is merely for information only, and may contain inaccuracies. It is NOT intended as a guide to treatment or diagnosis.

Myths about Strangles:

The Strangles vaccine will prevent my horse from getting Strangles. **False**

Several *S. equi* vaccines are commercially available. Vaccination of healthy animals on a farm during an outbreak is usually not effective, since at least 7 to 10 days for early IgM response is required for the immune system to respond to the vaccine. Current vaccines produce only short-term (six months to one year) immunity, and require regular boosters to maintain adequate protection.

My horse has already had Strangles so I don't have to worry. **False**

It is possible for a horse to get Strangles more than once in their lifetime. After battling strangles, a horse will develop some immunity to the disease that should protect them for the remainder of the season; it just doesn't last forever. Strangle immunity could be compared to the flu – most of us might catch it once during flu season, but when we do, we're generally safe from catching it again that season. It doesn't make us immune to all future years, though. One study reports 75% showed immunity to Strangles up to 4 years after infection.

Antibiotics can encourage bastard strangles to develop. **False**

Some people have proposed this happens because killing the organism could indirectly affect the development of immunity and thereby increase the risk of infection. But, there is no experimental or clinical studies that suggest that. Most immune stimulation occurs before clinical signs and therefore, before treatment starts, which has little effect on bastard Strangles formation.

My horse can get strangles from the vaccine. **True**

Intranasal vaccine is a live attenuated bacteria meaning the bacteria has a much lower virulence than "wild" strains but CAN cause disease symptoms.

Once my horse is over Strangles, I have nothing to worry about. **False**

Shedding the bacteria continues for up to one month after all clinical signs are gone in 20 percent of horses.

How long should a horse be quarantined for then?

- 4 weeks for known affected barns.
- 2 weeks recommended as incubation period is 2-6 days and onset of clinical signs follow shortly thereafter.

NOTE: Horses can be asymptomatic (chronic) carriers and can harbour the organism in the guttural pouch for as long as **39 months**.