

STRANGLES

(Equine Distemper)

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What: Bacterial (*Streptococcus Equi*) respiratory disease, highly contagious. The name strangles refers to the narrowing of the upper airway produced by the swollen enlarged lymph nodes in the head, throat and jaw regions. It usually occurs in young horses from 1 to 5 years of age, but can occur in horses of any age that do not have adequate immunity.

Symptoms: Nasal discharge usually from both nostrils, as well as eye discharge. Discharge is watery and clear at first, then becomes thick, yellow and pus filled. Horse may experience: a loss of appetite, a dry painful cough, high temperature from 103-106° F. Over the week following infection, the horse's lymph nodes in the neck, throat, and jaw area become hot, swollen and painful. The horse may stand with his head stretched down to the ground. Abscesses may form around the eyes, and in the jaw and throat area. Within a few days following abscessing of the lymph nodes, the abscess may burst releasing creamy pus. Fever, depression, and lack of appetite get worse immediately prior to the bursting of the abscess. After the abscess ruptures, the horse usually begins to feel better. It takes 1 to 2 weeks for the horse to fully recover following the rupture of the abscesses.

Transmission: The strangles bacteria are transmitted by inhalation or ingestion of the *Streptococcus Equi* organism. Once in the horse, the bacteria attach to the cells of the tonsil and lymph nodes of the upper respiratory tract and pharynx. The bacteria can be transmitted through exposure to an infected horse's nasal or airborne discharge, or abscess drainage as well as contaminated feed, water, stalls, equipment, tack, bedding, paddock and people or their clothing which has been in contact with ill horses.

Treatment: An ill horse should be rested, given adequate nutrition in the form of soft moist palatable feed (e.g.: bran mashes), kept warm in a dry, draft free isolated stall. Pain and anti-inflammatory drugs such as Bute may be administered to help increase appetite by reducing pain and fever. Lymph nodes should be lanced, drained and flushed with a dilute povidone iodine solution for several days until discharge stops. Vaseline can be used around the abscess to prevent scalding (burning) of the skin. Hot packs may also be used to speed up the abscess formation. Severely ill animals can be treated with penicillin for at least 10-14 days (at least 5 days after symptoms disappear). Severe cases where horses have difficulty breathing may require a tracheotomy (breathing tube inserted into the throat to relieve obstruction). If you suspect your horse has the symptoms associated with strangles, call the Vet immediately.

What to expect: 80% (80 of 100 horses) will recover completely. A small number of horses can become asymptomatic carriers which mean they harbor the infection and are not clinically ill but can spread the infection. They can be carriers for up to 1 year. 20%

(20 out of 100) of horses infected with Strangles will have complications. The number of deaths is low usually from 1-5% (1 to 5 out of 100 horses infected) but this number can be higher in severe outbreaks. Some of these complications include: pneumonia (lung infection), bastard strangles (abscesses appear all throughout the body but especially in the lymph nodes of the abdomen and lungs); and purpura hemorrhagica (an auto-immune disease). In the case of bastard strangles, the abscesses can rupture in the abdomen and lungs seeding infection all over these areas and this can be life-threatening. Purpura Hemorrhagica (PH) occurs more often in mature horses that get strangles. The symptoms of PH include swelling of the legs, belly and head and bleeding which may be mild or severe. The gums and mucous membranes of the horse appear purple due to the bleeding from the small capillaries found there.

Prevention:

- ✓ To prevent further spread of the infection, isolate infected horses as they are contagious for 3 to 6 weeks after they have clinically recovered from strangles.
- ✓ Quarantine all new arrivals on to a farm for 3 weeks and monitor the new horse for nasal discharge or signs of illness daily.
- ✓ Maintain well divided subgroups of horses (same horses in same areas)
- ✓ Limit movement of horses to different locations
- ✓ Handle (daily feed and care for healthy horses) before tending to ill horses
- ✓ Do not wear same clothes between ill and well horses.
- ✓ Wear rubber boots and disinfect with disinfectant; wash clothing in hot soap and water and dry in the dryer.
- ✓ WASH HANDS WITH DISINFECTANT SOAP between horses.
- ✓ Paddocks of infected horses should not be used for at least 1 month.
- ✓ Strip and disinfect stalls of ill horses with a disinfectant such as povidone iodine or chlorhexidine, soap and water and spray with diluted bleach solution (although some authorities believe bleach is not as effective). Leave stalls dry and empty for 4 weeks.
- ✓ Thoroughly disinfect tack, cleaning utensils, grooming equipment and feeding utensils (water buckets and tubs).
- ✓ Bedding should be removed from the property if possible or removed from contact with other horses. Streptococci Equi bacteria are killed by drying and sunlight but can remain infective for several months and they can survive in moist protected areas for up to a year.
- ✓ Vaccination- No currently available strangles vaccine is 100% effective. (They do decrease infections or the severity of the infections in large herds). Several inactivated injectable vaccines are available. The injectable vaccines are associated with side effects especially if given in the neck muscles including malaise (feeling tired and ill), fever, swelling, pain and abscesses at the site of injection. The intranasal vaccine (modified live bacteria) is generally associated with fewer side effects and may be somewhat more effective as it induces antibody in the nasal passages where the organism would normally gain entry.