

# Strangles

Strangles is a highly contagious and debilitating equine disease caused by the bacterium *Streptococcus equi*. Strangles is an important disease worldwide because it is highly contagious.

The common clinical signs observed in horses are:

- a nasal discharge (a greenish, yellow, or white “snotty” discharge)
- fever
- loss of appetite
- depression
- cough
- swellings that are a result of abscesses on the lymph nodes in the head and neck region due to an accumulation of pus.

The lymph nodes can become so enlarged that swallowing is painful and cause laboured breathing (hence the term, “strangles”). An affected horse might stand with its head and neck stretched out to relieve the pressure caused by the swollen lymph nodes. The enlarged lymph nodes usually burst and drain thick, yellow pus. The lymph nodes in the throat area can burst into the guttural pouches and result in copious nasal discharge. This pus is contaminated and can spread the disease. In rare cases *S. equi* can infect lymph nodes in areas other than the head and neck (such as the chest or abdomen). This is called “bastard” strangles.

Horses severely affected by strangles can die or require euthanasia. It can also cause immune complexes that damage blood vessels and subsequently cause limb and head swelling, circulatory failure, and death. Horses with partial immunity to *S. equi* or that were infected with a less-virulent strain of the bacterium can show a shorter course of disease with only minor or no lymph node abscesses. This is called the catarrhal form of strangles.

How long *S. equi* can survive in the horse’s environment is unknown. If the area is protected from ultraviolet light and the bacterium does not have competition from soil flora, it can survive for several weeks. It is spread in the pus from infected horses’ noses, draining lymph nodes, or by coughing. A horse shedding the bacterium can infect any object in the barn, including tack, feed

and water buckets, shared water sources (such as automatic waterers and troughs), brushes, and bedding. It can also be transmitted by direct nose-to-nose contact between horses or even by flies.

Horses usually develop clinical signs within three to eight days. Once the abscesses rupture and drain, recovery is typically uneventful and occurs in approximately two weeks. Horses can remain infective for weeks after recovery, and a small number continue to shed the bacteria intermittently for a prolonged time - even years - despite appearing completely healthy. Not all horses exposed to strangles become infected. Infection depends on the amount of bacteria the horse is exposed to, the immune status of the horse, and underlying conditions such as stress, nutrition, and pre-existing diseases. All ages of horses are susceptible; however, foals and young horses are most susceptible because they often have a less developed immune system. This disease is more commonly seen in horses with exposure to outside horses through travel to competitions or those maintained in large herds with a shifting horse population. Suspected strangles cases should be examined immediately by a veterinarian to confirm the diagnosis, alleviate the some of the symptoms, prevent the development of complications, and limit the spread to other horses. Horses with strangles should be isolated for six to eight weeks. Follow strict hygiene measures and disinfecting to ensure the bacterium is not carried to other horses on clothing, buckets, or vet equipment. Test to see if the horse is still shedding bacteria prior to contact with other horses.

