

Strangles

(also known as horse distemper)

Definition

Strangles, which also is known as horse distemper, is a highly contagious disease of horses. The disease is caused by the bacteria *Streptococcus equi*, which infects the upper respiratory tract of equine species (horses, mules, zebras). The disease gets its name – strangles – from the swelling of the lymph nodes under the jowl and around the throatlatch area, which can interfere with a horse's ability to breathe.

Strangles can occur in any age horse, although horses between 1 and 5 years old are affected more frequently. The disease is highly contagious, with 50 percent or more of exposed animals becoming sick. However, the disease is rarely fatal (less than 5 percent in well-managed cases).

Source of Infection

Horses become infected with strangles after inhaling or ingesting the bacteria. Usually this results from direct contact with infected animals or through shared feed and water containers.

Discharge from the nose or abscesses carries large concentrations of the bacteria and is highly infective. Contaminated clothing, boots, brushes and tack all can spread the disease from one area to another.

Animals that are in the initial stage of infection and those recovering from the disease are the usual source for introducing strangles into a new population. In rare instances, chronic carriers can shed the bacteria even though they show no signs of infection.

Four Stages of Disease

1. Early Stage of Infection

Initial symptoms may include depression, failure to eat or drink, clear nasal discharge (which will get thicker and creamy as the disease progresses), fever (as high as 106 F) and swelling of the lymph nodes under the jowl or in the throatlatch area. Affected horses may stand with their necks stretched out and be reluctant to swallow. Fever is often one of the first signs, and may precede other symptoms by one to two days.

2. Lymph Node Abscesses

Abscesses may develop in the swollen lymph nodes seven to 10 days after initial signs are observed. In many cases, this is the first sign that owners may notice. As the abscesses mature, they will rupture and drain thick, cheesy material. Note that the draining pus from these abscesses contains high numbers of infectious bacteria and anyone caring for the sick animals should take every precaution to avoid contaminating other areas with bacteria.

3. Exposed But No Symptoms

The first clinical signs usually develop within two to six days after exposure, although having the incubation period last 14 days is not uncommon. Shorter incubation periods usually reflect greater bacterial exposure.

4. Complications

A condition known as "bastard strangles" can occur in up to 20 percent of cases. This condition results when abscesses form throughout the body, with the most common locations being the lungs, liver, spleen, kidney and brain.

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Treatment

Because strangles is highly contagious, affected horses should be isolated immediately. Treatment is highly dependent on veterinarian preference and the stage of the disease. *Streptococcus equi* is very sensitive to a variety of anti-microbials, with procaine penicillin G being the drug of choice. Mild cases usually resolve without incident and probably do not require antibiotic therapy.

Local application of hot packs to swollen and abscessed lymph nodes also can be beneficial. In some cases, abscesses may need to be lanced to facilitate drainage and healing.

Horses with bastard strangles will require antibiotic therapy for an extended period of time (four to six weeks), and may require additional medical therapy, such as anti-inflammatory medications or intravenous fluids.

Prevention/Control

Isolating affected horses immediately is essential for the prevention and control of strangles. Any equipment, including all brushes, buckets and tack, that has come in contact with an affected horse should be disinfected thoroughly. *Streptococcus equi* is sensitive to most disinfectants as long as label directions are followed and the product is used appropriately.

In an ideal situation, personnel who do not have contact with other horses on the premises should care for isolated horses. If this is not possible, personnel should deal with affected horses last. Workers should wash and sanitize their hands thoroughly and change their clothing and boots before leaving the isolation area. Other precautions include using disposable plastic boots and wearing rubber gloves.

Once a horse enters the isolation area, it should not be allowed to leave until a veterinarian deems it clear of infection. Affected horses can shed strangles bacteria for as long as six weeks after infection, even though they may appear clinically normal. These recovering horses are often the source of infection for other animals.

Vaccination

Most horses will develop immunity to strangles after infection, with that immunity lasting at least five years. However, the idea that “once a horse has had strangles, it never will get it again” is incorrect, as immunity to the disease will decrease through time.

Several strangles vaccines are available, with products being given either intramuscularly or intranasally. Vaccination will not guarantee prevention of the disease, but it may lessen severity and duration, and does seem to be effective in helping control outbreaks.

Guidelines for Handling an Outbreak

Strangles is a common, highly contagious, bacterial disease that affects horses.

Keep the following guidelines in mind if an animal on your premises is identified as having strangles.

- Isolate the infected horse(s) immediately.
 - The isolation area should prevent any direct contact with other horses. Turnout areas, water and feed troughs, and tack items must not be shared with other horses.
- Contact your veterinarian for treatment options, especially if the horse is having trouble breathing, is not eating or is running a high fever.
- Monitor all other exposed horses daily and immediately isolate them if they show any symptoms of strangles, including running a fever of 103 F or greater.
- Restrict movement of animals into or out of the facility.
- Animals typically recover in approximately three weeks; however, bacterial shedding can occur for months. Ideally, recovering horses should be tested by a veterinarian and return three negative cultures before being returned to the herd.
- All water containers, feeders, brushes, stall walls, fencing and trailers should be cleaned thoroughly and disinfected before being returned to general use. Strangles bacteria are susceptible to most disinfectants as long as label directions are followed and the product is used appropriately.
- The exact length of time that strangles can survive in the environment varies widely. A general recommendation is that pastures and turnout areas that housed infected animals should be left open for at least 30 days.

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