

Strangles (*Streptococcus equi* infection)



Strangles is a highly contagious infectious disease and can be serious or occasionally even fatal as a result of late diagnosis. Know what to look out for and you will almost certainly avoid the unnecessary suffering of your horse and others.

What is strangles?

Strangles is a highly contagious infectious disease caused by a bacteria called *Streptococcus equi*. The bacteria affects the lymph nodes and is spread to other horses by direct contact, contaminated food, water, equipment or people's hands/clothing. Horses can also catch the disease by inhalation of the bacteria, but this is less common. The organism can survive for long periods in the carrier horse or in the environment in the right conditions.

Younger horses (1-5 years old), sick horses, horses with compromised immune systems, herd horses, stud farms, racing stables, livery yards and riding school horses are more at risk because of the way the disease is spread. Poor condition, parasitic infestation, the introduction of a new horse to a yard, poor general management, stress factors, cold and damp weather can all lead to the contraction of strangles. Outbreaks of strangles are often associated with a non-related viral infection that further weakens horses and makes the development of strangles more likely.

Strangles is not usually fatal, but if left untreated the lymph nodes can abscessate. The abscesses usually burst and drain away, but in severe cases an abscess can become so large it causes the windpipe to become crushed resulting in suffocation of the horse. Occasionally the bacteria will overwhelm the local lymph nodes of the submandibular region and will spread systemically throughout the horse. Abscesses can then form in the lymph nodes of the lungs, intestines and even in the brain itself. Such an overwhelming infection is called "bastard strangles" and rupture of these abnormally placed abscesses can prove fatal.

How do I know if my horse has strangles?

If your horse has strangles, you will notice a change in his behaviour, he will become depressed and lose his appetite and he will find it difficult to swallow due to the inflamed lymph nodes. Some lymph nodes may abscessate and discharge pus in the throat area or under the jaw. Your horse will develop a sudden high temperature (often as high as 40 degrees C (104 degrees F)) and nasal discharge, you will also notice pain and swelling in the throat area and occasionally coughing. In most cases however, symptoms do not appear until after 2-6 days from infection, although in individual animals this may increase to 14 days.

What should I do if I think my horse has strangles?

If you think your horse has strangles it should be immediately isolated, away from other horses, only then should you call your vet. Your vet will perform a physical examination. Isolation of the bacteria from a clinical case by sampling any discharging pus or via throat swabs is the only way to definitively diagnose the case. Endoscopy of the guttural pouches is very useful in diagnosing the carrier case, including culturing flushings from the pouches. If the diagnosis is positive your vet will discuss the options for treatment with you. In most cases, treatment of strangles usually starts with an intensive nursing regimen. Your horse will need to be rested and must remain in isolation, in a dry and warm environment. Feeding soft palatable feeds will help the horse eat, and fermenting abscesses with hot packs will encourage abscesses to burst and drain. In severe cases, abscesses may need to be drained surgically, to avoid suffocation, and then be flushed.

The use of antibiotics in the treatment of strangles is controversial and should be discussed with your vet. The recovery rate is good if detected at an early stage. Once treated, horses will show improved signs within 2-5 days and their appetite will return along with a reduced temperature. Most horses are no longer infectious 6-8 weeks after apparent recovery and disappearance of symptoms. Some individuals, however, can remain carriers of the disease organism for months to years. In these cases the bacteria is primarily found in the guttural pouch and shedding of the bacteria from this source can cause continued infection of new in-contact, previously unaffected, animals.

Six to eight weeks after resolution of the clinical signs the horse should be checked for carrier status before return to contact with other horses. Three negative throat swabs over a 2-week period or negative culture from the guttural pouch flushings will determine each individual horse's status. Occasional clinically

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healthy animals may not be detected as carriers unless throat swabs are taken over a longer period of up to 2-3 months.

Failures in treatment are usually a result of late diagnosis or non-aggressive support.

How can I prevent my horse from contracting the disease?

In order to prevent your horse from contracting strangles, follow the guidelines below:

- Do not allow new horses to enter the premises unless they can be kept in strict isolation.
- Monitor all new horses closely for 2 weeks. Consider taking throat swabs on 3 separate occasions.
- Place all infected horses and any horses that have been in contact with them in strict isolation.
- Maintain strict hygiene. Cleaning and disinfection are especially important.
- Investigate cases that last longer than 6-8 weeks.

A strangles vaccine is available - ask your vet for further information.

The Horserace Betting Levy Board (HBLB) produces guidelines on strangles in their Codes of Practice.

For further information:

HBLB, 52 Grosvenor Gardens, London SW1W 0AU, UK. Tel +44 (0)2073 330043; Fax: +44 (0)2073 330041; Email: postmaster@hblb.org.uk; Website: www.hblb.org.uk.

Can my horse be vaccinated against the disease?

YES...

- A submucosal vaccine is now available for the immunisation of horses against *Streptococcus equi* to reduce the clinical signs and occurrence of lymph node abscesses.
- The vaccine is intended for use in horses for which a risk of *Streptococcus equi* infection has been clearly identified, due to contact with horses from areas where this pathogen is known to be present, eg stables with horses that travel to shows and/or competition in such areas, or stables that obtain or have livery horses from such areas.
- A horse's vaccination programme should be based on the risk of disease for the horse and also the economic consequences of an outbreak. In general, the more a horse is in contact with other horses the greater its risk of contracting strangles.

Vaccination programme

High-risk

- **Initial vaccination:** two vaccinations, 4 weeks apart.
- **Re-vaccination:** every 3 months.
- **Outbreak situation:** no additional vaccinations required.

Medium-risk

- **Initial vaccination:** two vaccinations, 4 weeks apart.
- **Re-vaccination:** every 6 months.
- **Outbreak situation:** re-vaccinate if more than 3 months since the last vaccination.

Low-risk

- In general, there is no need to vaccinate in low-risk situations.

If you want any other information on health issues concerning your horse please contact Hampden Veterinary Hospital on 01296 423666 and we will be happy to advise you.