Strangles Factsheet

This factsheet has been developed in partnership between the Hurlingham Polo Association and veterinary advisers to explain the facts about Strangles, how to recognise it, and how to prevent the spread. It should be referred to by polo clubs, grooms, and pony owners to reduce the risk of transmission throughout the year.

What is Strangles?

Strangles is a respiratory infection caused by a bacteria (Streptococcus Equi Equi) that leads to purulent infections (abscesses) of the lymph nodes (glands) with those under the throat the most likely to be affected.

Strangles is a widespread infection but outbreaks tend to be sporadic in nature. Most horses have not been previously exposed to it and thus have little or no immunity.

How does it spread?

- The disease is highly infectious
- Pus is the main mechanism of passing on the disease
- Horse to horse contact is the usual means of spread
- The bacteria are killed by most simple disinfectants or soaps (such as Hibiscrub)
- It can survive in globules of pus or in water for extended periods of time
- It can be passed on by people, other animals or objects and by contamination of the environment (eg water troughs).
- Coughing horses can spread the infection to a distance of approximately 10 metres.
- Solid walls are effective at stopping transmission.

What does it look like?

Typical Strangles

- Acute respiratory infection
- Nasal discharge
- High temperature
- Enlargement of the lymph nodes under the throat

Atypical Strangles

- Mild nasal discharge, short lived temperature rise and no glandular enlargement
- Enlarged lymph node (not always under the throat) without a history of respiratory infection

How is it diagnosed?

- PCR tests of purulent material are the gold standard tests.
- PCR tests of pharyngeal swabs can pick up the disease in acutely infected cases but may remain negative until purulent material is produced.
- PCR tests of guttural pouch washes are used to prove lack of the disease after the infection has run its course or to prove that potentially exposed horses are disease free.
- Blood tests for antibodies can be helpful in screening for exposure but are not helpful in the acute phase of the infection as they take some time to become positive.

REPORTABLE DISEASES: If a polo pony contracts Strangles, Ringworm, EHV, or Equine Flu at any time, it must be reported to the HPA. Any suspected cases should be examined by a veterinary surgeon and their advice followed.

Treatment

Horses with clinical signs should be isolated, treated with NSAIDs (such as Bute), and the infected glands opened surgically or encouraged to burst by use of hot towels. Penicillin is effective in killing the bacteria but will not work if pus is present, and may even delay the bursting of abscesses. It should only be used under veterinary direction.

Most horses will recover on their own with time as they develop their own immune response. There are occasional deaths and these are usually associated with infection of deeper lymph nodes such as those around the throat or within the chest or abdomen (known as 'bastard strangles') or due to an immune-mediated reaction to the infection that leads to generalised swelling of the legs and haemorrhages of the gums (purpura haemorrhagica).

Horses that have had the disease often take a significant length of time (many months) to clear the infection fully. A nasal discharge or a draining tract from a gland is easy to spot, however the infection can reside without other symptoms within the guttural pouches, which are cricket ball sized pockets that join into the inside of the throat by small slits.

Some horses will become true carriers of the disease, being permanently infected and are unable to resolve the infection. They do not show clinical signs but will occasionally shed the bacteria into the environment and potentially start a new outbreak.

The gold standard of testing to ensure resolution of the disease and to search for carriers is to perform guttural pouch washes of both sides of the throat. This is a technically demanding veterinary process that is performed by endoscopic examination of the guttural pouches and sample taking before PCR testing at a laboratory.

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Prevention

Honest monitoring of any potential case at any time of the year is important. If it is known where the disease is, horses can be isolated, treated and tested to eliminate the infection.

High risk horses are often young horses that have been mixed with others of unknown disease status that may be subclinical carriers. Some parts of the country can also be of higher risk than others.

Bringing these horses directly into a yard and mixing with other horses is risky and is best avoided. If they do come into a yard, these horses should be isolated from others for 2 weeks and observed for acute infection. Testing for subclinical infection or carriers can be performed by blood test as a screen of by the gold standard of guttural pouch washing. A decision on testing should be made by getting veterinary advice, getting a declaration from where the animal has come from as to the presence of any infection in the past and by a general risk assessment.

Strangles outbreaks cause significant issues that extend well beyond the disease itself. The advent of effective testing is helpful in managing an outbreak however it should always be remembered that no testing strategy is 100% effective. Vigilance and early isolation is as important. There is a significant financial cost, both directly and indirectly, which is hard to avoid without the risk of extending the outbreak to other properties.

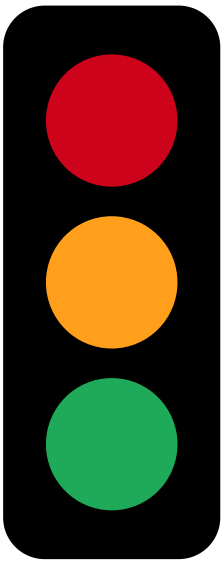
The HPA is always available to give advice, and the goal of any treatment protocol is complete eradication of the disease wherever it is encountered.

Dealing with a Strangles outbreak

- Get veterinary advice
- Inform the HPA
- Isolate horses into groups

Use the traffic light system

Horses should be split into groups depending on their current status and recent proximity to horses in other groups. You should have a plan in place on how to split horses into groups before an outbreak happens.



RED GROUP
Those with the clinical disease

AMBER GROUP
Those that have had potential exposure to a horse in the red group anytime in the previous two weeks but are currently well with no clinical signs.

GREEN GROUP
Those with no exposure and not handled by people caring for horses in the red group.

Red group horses should be moved to a completely isolated area. Double fencing fields so that there is at least 10 metres between horses is the minimum requirement.

If an outbreak occurs during the playing season, then it is strongly recommended to remove affected horses to a completely different yard or field, so that there is no chance of mixing horses or the staff that look after them.

The incubation period of Strangles is usually within a week, but can be up to 14 days.

Horses in the **amber group** should have temperatures taken and recorded twice daily, and be examined for any evidence of nasal discharge or swelling of the glands. If any of these occur, the affected horse should be immediately removed from the amber group and be tested by a veterinary surgeon to ascertain if they are infected. The remaining horses in the group must then restart their amber period. It is best to act on any suspicion rather than wait and see if the disease develops.

Once there have been **two weeks** with no new further cases in the **amber group**, then these horses should be tested to ensure that they have not been exposed to the disease and are not suffering from a subclinical infection. All horses that could have potentially been exposed should be tested. This may be an expensive and time-consuming process, but is essential to ensure that these horses do not pose a risk to others.

Horses in the **red group** can be tested one month after clinical signs have resolved, with a view to bringing them back into contact with other horses. These horses should now be immune and as long as it is determined that they are not still harbouring any infection in their guttural pouches, they are safe to come back into work.

Horses in the **green group** should also have their temperatures taken and recorded twice daily and should be regularly examined for signs of nasal discharge or glandular swelling. Any mixing of horses and grooms should be discouraged. If a horse in the **green group** becomes infected, then all horses in that group should then be designated as an **amber group** unless there is a substantial geographic separation from the newly infected horse. If a new case cannot be explained by a history of horse movements and exposure, then the location of the disease is unknown, and all horses are of unknown disease status and are to be considered **amber**.

If the horses in the **green group** have always been geographically isolated from the **amber** or **red** horses, then it may be possible for them to continue to play polo, however this should only be with the agreement of their vets, the HPA veterinary advisers, and the clubs or premises that these horses will travel to. This will depend very much on the geography of the yard and will only be possible if the horses are separated effectively by distance such that their risk of having the disease is almost zero. Any change in disease status of a green horse will lead to immediate suspension of any horse movement from the whole property.

At the end of an outbreak at a property or at the point where it is declared that a group of horses are now free from disease (for example if they were in an **amber group** that was moved to another yard and then tested after two weeks) then a report by the treating veterinary surgeons must be submitted to the HPA to be assessed before the horses are cleared to return to play.

For further guidelines on Strangles from the Horseracing Betting Levy Board, please click here.