

Equine Strangles

The upper respiratory disease commonly referred to as “Strangles” is caused by the bacteria *Streptococcus equi subspecies equi*.

Clinical Signs

- Fever, usually preceding other clinical signs by 24–48 hours
- Thick nasal discharge out of one or both nostrils
- Swollen lymph nodes under the chin or throatlatch that may abscess and drain pus
- Soft non-productive cough that is often associated with eating
- Occasionally, horses may experience more severe clinical signs such as labored breathing, abscesses in the chest and/or abdomen, or serious immune-mediated complications.

Incubation Period

- The bacteria reach the lymph nodes within hours of exposure.
- Clinical signs begin 3–14 days after exposure.
- Nasal shedding usually begins 2 to 3 days after the onset of fever.

Transmission

- Nose-to-nose contact between horses
- Contaminated fomites such as water troughs, buckets, grooming tools, tack, handlers, etc.
- Transmission can occur from horses with no obvious clinical signs who have developed a persistent subclinical shedder or “carrier” status.

Treatment

- Treatment depends on the stage and severity of the disease and treatment decisions should be made by the attending veterinarian. Antibiotics are not used in the majority of cases.

Recovery

- Typically, horses continue to shed bacteria for 2-3 weeks post-recovery, but some may continue to shed for 6 weeks or longer.
- In some “carrier” animals, intermittent shedding may occur for months to years.

Preventing an Outbreak: Biosecurity Guidelines for Receiving New Horses

- Quarantine new arrivals for at least 3 weeks and take rectal temperatures twice daily.
- New arrivals can be screened with a Respiratory PCR Panel and/or infection level test (SAA).

Preventing an Outbreak: Biosecurity Guidelines for Horse Shows and Events

- Take your horse’s temperature before leaving your home property. If your horse has a fever, stay home and call your veterinarian.
- Do not use community water troughs or buckets!
- Fill water buckets directly from the faucet. Do not submerge a hose in a water bucket.
- Avoid nose-to-nose contact with other horses.
- Event officials should consider a brief inspection of horses on arrival to identify signs of clinical disease such as nasal discharge or fever.

Vaccination

- Currently considered to be a risk-based vaccine according to the AAEP Guidelines.
- Strangles vaccination is often recommended in boarding barns or properties with horses often traveling in and out, especially properties that receive horses from auctions.
- Specific vaccination decisions should be discussed with your veterinarian based on each horse's individual situation.
- If a horse has recently been sick with or exposed to strangles and has a high immune response to it, they are at risk of a serious reaction if they receive the strangles vaccine too soon after exposure. Recently sick horses should not be vaccinated for strangles for at least 1 year. Some horses have protective immunity for 5 years.
- For horses with potential past strangles exposure or unknown history, SeM titers can be measured with a blood test before vaccination to identify individuals at risk of developing complications.
- The Strangles vaccine comes in two different forms, intramuscular and intranasal, each with their advantages and disadvantages.

Intramuscular vaccine:

- Less expensive
- Administration is well tolerated by most horses (IM like most other vaccines)
- Can cause neck soreness/swelling
- Not as effective as the intranasal vaccine but usually still decreases severity of disease

Intranasal vaccine:

- More effective as it is a modified live vaccine given directly in the respiratory system
- It is quicker to get full immunity because the initial series can be done in 2-3 weeks vs 6 weeks
- Horses dislike the administration (up the nose)
- It must be given after all other injections in the barn to avoid contamination of needles and cannot be given at the same visit as a dental or joint injections.