Streptococcus Equi (Strangles)

**Disease Name:** *Streptococcus equi*. Also known as "Strep Equi" or Strangles.

**Disease Type:** Bacterial infection.

**Transmission:** *Strep Equi* is spread from horse to horse through direct contact. Horses can also contract the disease by coming into contact with contaminated surfaces. The disease is highly infectious.

**Frequency:** *Strep Equi* is extremely common. Most horses are exposed and/or infected at a young age.

**Incubation period:** 3 to 14 days.

**Carrier status:** Horses who have been infected but are clinically healthy can continue to incubate and shed. A recovered horse may be a potential source of infection for at least 6 weeks after the clinical signs of strangles have resolved. Some horses that have recovered from the disease can become long term, periodic shedders and can cause outbreaks when introduced to new herds.

**Shedding period:** Horses infected with *Strep equi* are a source of infection to others and often continue to shed for up to 6 weeks post recovery.

**Latency:** *Streptococcus equi* is present during the incubation period and the horse can be a carrier without any clinical signs.

**Severity:** Low.

**Clinical signs and symptoms:**

- Fever, usually preceding other clinical signs by 24-48 hours
- Abscesses in the mandibular lymph nodes (in the throatlatch and below the jaw)
- Nasal discharge: often thick white and yellow mucus
- Inflammation of the throat
- Difficulty swallowing
- Wheezing
- Cough
- Purpura hemorragica- bleeding from the capillaries which causes red spots on the mucous membranes and swelling of the limbs and head (rare; only in cases with complications)
- Swelling of the muscles (rare: only in cases with complications)

**Diagnosis:** Diagnosis is made through culture of nasal wash, nasal swab, or pus aspirated from abscesses or through PCR testing.
**Treatment:** Supportive care is the primary treatment. Use of antibiotics in infected horses is restricted to those with severe clinical signs such as respiratory difficulty as most horses recover without antibiotic treatment. Horses treated with antibiotics early in the course of infection may avoid lymph node abscesses but may not develop immunity to the disease. Treatment decisions should be made by a veterinarian.

**Prognosis:** Good: Strangles is rarely fatal and horses usually make a full recovery in three to four weeks with few complications. Horses who have been infected with Strangles can maintain long-term immunity to that strain.

**Prevention:** An intranasal vaccine is available but is not effective against all infections. Any surfaces that are contaminated with mucus or other nasal discharge from infected horses pose a threat of infection to healthy horses. Post outbreak, cleaning should involve removal of all organic material from surfaces and subsequent disinfection of water containers, feeders, fences, stalls, tack and trailers.

**Biosecurity:** *Strep equi* outbreaks can be hard to prevent because of the prevalence of subclinical carriers (clinically healthy horses who shed the virus for weeks or even years after recovery). Outbreaks are common, especially in facilities with high horse traffic where new horses are frequently moved between stables or herds. Whenever possible, new horses should be quarantined for up to three weeks when being introduced to a new facility. High standards of hygiene should be maintained in facilities to decrease chance of horses coming in contact with contaminated surfaces. To prevent indirect infection during an outbreak, handlers should avoid coming in contact with susceptible animals after handling infected animals. Handlers should wear protective clothing, avoid using the same equipment on multiple animals, and disinfect hands and equipment when moving between animals.