

Veterinary Update

Animal Health and Welfare Branch/Office of the Chief Veterinarian for
Ontario

Ontario Ministry of Agriculture and Food

Biosecurity Update

February 27, 2014

Cases of Strangles in Waterloo-Wellington County

The Ontario Ministry of Agriculture and Food (OMAF) has received reports of several cases of equine Strangles (*S. equi* sp. *equi* infection) in the Waterloo-Wellington County area. Strangles is not a reportable disease in the province of Ontario, however, it is highly contagious to horses and other equids, and outbreaks are a concern to the equine industry. The reported cases have predominantly shown signs of high fever (40-41°C) and mucopurulent nasal discharge with only occasional horses developing enlarged lymph nodes with abscessation.

Disease Facts:

- Strangles is a highly contagious infection of horses caused by the bacterium *Streptococcus equi*.
- Clinical signs include fever, nasal discharge and, most typically, lymph node abscessation.
- Transmission occurs by direct nose-to-nose contact with infected horses or via contact with contaminated surfaces, objects or people (e.g. twitches, tack, buckets, feed troughs, stall walls, fences).
- The bacterium can survive indoors for weeks to months depending on temperature.
- The disease is diagnosed by detection of *S. equi* using bacterial culture and/or polymerase chain reaction (PCR) testing of nasal or lymph node discharge, nasopharyngeal (throat) swabs or nasal or guttural pouch washes.
- Treatment involves managing the fever and encouraging abscesses to burst. Antibiotics should only be used under veterinary supervision as they may prolong the maturation of abscesses and the disease process.

Infection control

- Minimize all human and animal traffic in and out of the premises. **No horses should leave the premises unless they are being taken to an isolation facility, as this increases the risk of spread to other horses.** All owners, riders and other personnel in the barn should be made aware of the situation to ensure strict control measures are followed, and so they don't inadvertently carry the bacterium to other equine facilities
- Isolate suspect horses as much as possible in a separate, low-traffic area or treat the stall as a quarantined area.
- Handle infected and suspect horses using gloves, designated coveralls and designated footwear/footbaths.

- Promote hand hygiene (using products such as alcohol-based hand sanitizers) even when gloves are worn.
- Take temperatures twice daily on all horses in the facility, including those not showing signs of disease. If a fever is detected (>38.5°C, >101.3°F), the horse should be considered infected and isolated/quarantined until diagnosed. Monitoring should continue for at least two weeks after the last case shows clinical signs.
- Clean all equipment and surfaces of visible organic material (e.g. dirt, hair, manure) before applying disinfectants. Most common disinfectants are effective.
- Test horses that have recovered from disease at least twice at one week intervals using throat swab or nasal wash samples to confirm they are negative.
- Identify those horses that are carriers and intermittently shedding *S. equi* by testing nasal or guttural pouch washes. Carriers can shed the bacterium for months or years.

Prevention

- **Isolate new horses coming on to the farm, or those returning from extended absences, for 2-3 weeks and test them to ensure that they are not shedding the bacterium. If isolation cannot be performed, barn managers should ask for proof of Strangles-free status (based on recent testing) prior to accepting new horses.**
- Discuss with your veterinarian about vaccinating for Strangles. Vaccines can help minimize the severity of disease but may not be appropriate during outbreaks. It is recommended that horses that have been frequently vaccinated for Strangles or have had the disease itself should have a *S. equi* antibody titre performed prior to vaccination to avoid potential immune reactions.

The best method of disease control is disease prevention. See the resources below for other basic biosecurity and infection control practices.

RESOURCES

OMAF

<http://www.omafra.gov.on.ca/english/livestock/horses/facts/03-037.htm>

http://www.omafra.gov.on.ca/english/livestock/horses/facts/prot_strangles.htm

<http://www.omafra.gov.on.ca/english/livestock/horses/facts/prev-disease-spread.htm>

WORMS & GERMS BLOG

<http://www.wormsandgermsblog.com/uploads/file/JSW-MA2%20Strangles.pdf>

EQUINE GUELPH

http://www.equineguelph.ca/Tools/biosecurity_calculator_2011-09-12/Biosecurity_Calculator.htm

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