

Veterinary Update

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

Ontario Ministry of Agriculture and Food

Biosecurity Update

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Strangles in Ontario

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) continues to receive reports of cases of equine Strangles (*S. equi* sp. *equi* infection) circulating in Waterloo Region, Wellington and Middlesex Counties as well as other regions in Ontario. 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. Horse owners and caretakers, industry participants and especially Equine Event Managers for shows and competitions are urged to use and enforce biosecurity practices, particularly if competing/travelling or organizing events.

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.
- Horses that recover from the infection can become **carriers** of the bacterium in the guttural pouches for months to years. **The carrier state is the main way by which horses continue to spread the bacterium from horse to horse across the province and needs to be addressed to break the cycle of transmission (see below for testing procedure).**

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 disposable 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 swabs or nasal wash samples to confirm they are negative and to identify those horses that are carriers and intermittently shedding *S.equi*.

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 or a veterinary certificate) 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

OMAFRA

<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

EQUINE CANADA

http://equinecanada.ca/industry/index.php?option=com_content&view=category&id=317&Itemid=638&lang=en

http://equinecanada.ca/industry/index.php?option=com_content&view=category&id=300&Itemid=628&lang=en

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