Strangles in New Zealand

The disease caused by the bacterium *Streptococcus equi var. equi* is common in New Zealand, as it is in many countries where there is a significant population of horses.

The disease is found throughout the country and is a readily transmissible disease enhanced by the normal movement of horses between premises, especially in race yards and studs.

Some horses can outwardly show no signs yet still carry the infection and spread it to other horses. Currently these carrier horses can be very difficult to identify.

Signs of strangles can include fever, loss of appetite, depression, marked 'snotty' nasal discharge, lymph node swelling and abscesses predominantly of the head and neck. Not all horses will show all (or any) of these signs.

Strangles can be transmitted both directly via close contact with an infected horse, or indirectly through shared housing, water and feed buckets, shared tack and equipment; and contact with shared personnel such as groom, instructor, farrier, veterinary surgeon or more unexpected sources such as a pet dog

As seen in the last few years, strangles outbreaks have caused headaches for large studs and racing yards, some of which have been reported in the mainstream media.

It is likely that many more outbreaks sail under the radar and are kept quiet between the treating veterinarians and clients, thus the true extent of strangles in New Zealand is hard to quantify.

Prevention of the disease through the use of vaccination is difficult to achieve. Although the use of the vaccine is commonplace amongst some studs and higher risk establishments, protection from the vaccine is mediocre at best.

It is widely accepted that the severity of disease in vaccinated horses is reduced and may be protective in up to 50% of vaccinated horses. Immunity gained from vaccination and also naturally occurring disease is quick to wane and regular boosters are required to help protect at risk horses from future disease.

Click here to view the New Zealand Equine Research Foundation's (NZERF) reference document and their recommendations for managing equine strangles in New Zealand.

The NZERF's recommendations are summarised below:

Voluntary Code for Strangles

Many countries have promoted the adoption of voluntary code as a way to handle disease outbreaks. If there is a case of suspected strangles it is recommended to:

1- Isolate the horse and any horses that have had nose-to-nose contact with the suspect horse
2- If possible create three groups of horses a) Infected stock b) Stock that have had close contact with the infected c) Clear stock. Groups should be separated by 25m or more.

3- Call the veterinarian for a diagnosis. This will require nasal samples being submitted for laboratory testing.
4- Discuss with the veterinarian isolation and handling procedures.
5- Introduce strict hygiene practice between stock groups immediately to reduce the risk of disease spreading and to reduce time take to control the outbreak. Use protective, disposable clothing. Have separate water troughs, grooming, cleaning and feeding equipment. If possible have separate staff for each stock group, if not attend the unaffected horses first.
6- Don't allow horses on or off the property
7- Discourage visitors to the property and confine pets such as cats and dogs
8- Contact owners
9- Notify neighboring properties with horses
10- An infected horse should not leave the property until it has had 3 consecutive negative culture results from Nasopharyngeal swabs taken over a 2-week period, or an endoscopically guided guttural pouch lavage.

There are no legally enforceable notification requirements for strangles in New Zealand, and unlike the United Kingdom and Australia, racehorse trainers are not required to inform the racing authorities if they have a confirmed or suspected case of strangles in their stables.

The New Zealand Equine Veterinary Association encourages the use of the above code of conduct for dealing with any suspected or confirmed cases of strangles in any management situation.

Click here for further information on strangles management.

Sidenote: There is a blood ELISA test used to identify carrier animals or check for suspect cases, though it is not readily available in New Zealand.

There have been occasions when blood serum testing has proved useful in the management of some strangles outbreaks in New Zealand though the testing laboratories do not hold the reagents for the test they can import them on request.

Economically this may only be feasible with larger numbers of horses (i.e. more than 50) such as in a stud or large racing yard.

This test is an easier and economical way to quickly screen a large number of at risk horses.

This test is helpful due to the fact that although carriers only shed *S. equi* intermittently, over 90% of carriers maintain specific antibodies in their blood.

Newly exposed horses take at least two weeks to develop sufficient antibodies to give a positive blood ELISA result and may remain positive for up to six months after recovery. Positive horses in a population of in-contact and at risk horses could then be subjected to more intensive testing, such as guttural pouch washing and PCR testing.