



ONTARIO  
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FEDERATION

## Biosecurity for Breeding

*By Brianne Henderson and Janet Henderson*

Responsible breeders not only carefully consider the suitability of the horses they are breeding and the future of the resulting foal, they also follow biosecurity and genetic guidelines to prevent the occurrence and spread of diseases. If you are an active breeder, it is your responsibility to be informed.

Current Contagious Equine Metritis (CEM) outbreaks within the United States have mandated that any Canadian horse crossing into the United States for breeding purposes must undergo additional examination, testing and paperwork. CEM is a reportable disease, which is spread by infected stallions, instruments and gloves. Stallions are capable of carrying CEM without any obvious clinical signs, while mares typically experience a thick white discharge from their vulva with associated discomfort. In order to prevent the spread of CEM within our breeding population, horses must be identified and treated. Other venereal diseases which should be monitored include Equine Herpes Virus 3 (coital xanthema), Equine Viral Arteritis (EVA), other bacterial infections (Klebsiella, Pseudomonas), and potentially Equine Infectious Anemia (EIA) and Piroplasmiasis.

Equine Viral Arteritis (EVA) is a contagious disease that causes abortions in mares and life threatening illness in newborn foals. The virus is able to spread during the breeding process (shed in semen) as well as by air. Outbreaks in France have had major economic implications with the loss of pregnancy, foals and restricted horse movement/quarantine within the country. Shedding of the virus in a stallion's semen is dependent on testosterone. Many stallions that are tested positive for EVA must then be castrated. A commercial vaccine is available for EVA protection.

In the last 10 years it has become more common to see stallions advertised as "SCID clear" or "HYPP negative." Genetic testing of stallions requires a simple hair/blood sample and will allow us to remove stallions carrying genes for diseases that cause disease/death in their foals. Diseases commonly tested for in breeding stallions include:

- 1) Severe Combined Immunodeficiency Disease (Arabians)
- 2) Hyperkalemic Periodic Paralysis (Quarter Horses)
- 3) Lavender Foal Syndrome
- 4) Cerebellar Abiotrophy

### Limit the risk

Common biosecurity recommendations for the average breeding farm include pre-season breeding soundness exams on all mares to rule out lingering uterine infection, CEM and anatomical injury (cervical damage) from the previous year's foaling.



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Stallions should also have a breeding soundness exam prior to the first collection of the year in order to rule out carrier states of CEM and EVA, as well as a spermatic count and morphology exam to ensure fertility.

If you are breeding by live cover, this needs to be done in addition to standard biosecurity protocols (negative Coggins test, current vaccination history, no fevers/nasal discharge/diarrhea or swollen lymph nodes within their recent health history or the history of horses at their barn) for any horse coming onto your farm.

Click [here](#) for more information about responsible breeding.

### ***About the authors:***

*Janet Henderson is a competitor, coach and producer of Crabbet Arabian Sport Horses. She is an EC licensed horse show judge in seven divisions, a USDF “L” graduate with distinction and a USEF licensed judge for the Arabian division. She is also a lay-judge for long distance riding. She has a lifetime of knowledge in the horse industry and is a strong advocate of the meticulous production and development of talented equine athletes.*

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