

# Herpes: the hidden horror



Broodmares should be managed in small groups with similar due dates, and kept out at pasture, to avoid carriers of the virus from transmitting it in large numbers and causing 'abortion storms'

Breeding mares are most at risk of contracting herpes in springtime.

**Emma Houghton MRCVS** advises how to reduce the risk of this insidious disease

**E**QUINE herpes virus (EHV) is present within the horse population worldwide. There are two common types, EHV-1 and EHV-4. Of these, EHV-1 is more serious as it can cause respiratory disease in young horses, abortion in pregnant mares and neurological paralysis in all ages. EHV-4 usually tends to result in a lower grade of respiratory disease, however it can still cause abortion and neurological paralysis.

Spring is the time of year when breeding mares are at highest risk of suffering an EHV abortion.

At this time of year, most breeding mares are in the last third of their pregnancy, with up to 95% of diagnosed EHV-1 abortions occurring at this stage. The incubation time of the virus varies between nine and 121 days, and breeding

mares may not show any clinical signs before they abort.

In addition, abortion "storms" can occur whereby the virus is unknowingly transmitted throughout breeding mares carrying EHV without symptoms, resulting in multiple abortions.

Weak foals are occasionally born alive following infection of the mare. Unfortunately, in most cases, the foal will then develop fatal pneumonia in the first few days of life.

A total of seven cases of EHV abortion were confirmed in the UK in 2015. However, some abortions may not have been reported or the postmortem not completed so this number may be a conservative estimate.

In 2014, several abortions due to EHV were recorded in the UK. These involved non-thoroughbred mares and fortunately

were all isolated events. Appropriate control measures were implemented, which successfully prevented the spread of the disease.

### The symptoms

RESPIRATORY signs of both EHV-1 and EHV-4 can vary, but usually involve:

- a clear or purulent (consisting of or containing pus) nasal discharge
- loss of appetite
- depression
- fever
- occasional coughing

### Neurological signs are identified by:

- hindleg paralysis
- recumbency

It's often the case, however, that pregnant mares in the last eight to 11 months of pregnancy display no clinical signs.

Picture by David Miller

### How the virus is spread

- **Contact:** can be through nose-to-nose contact between horses, or via nasal secretions or materials such as buckets, rugs or clothing.
- **Through the air:** it is possible for the virus to be spread as far as 50 metres within the air.
- **Body fluids:** the aborted foetus, placenta and placenta fluids are also infectious and must be carefully removed.
- **Stress:** the virus remains present within our horse population mainly due to "carriers" — horses that harbour the infection in an inactive form. Under stressful conditions the virus is reactivated within the carrier and can then be transmitted to other horses by direct and indirect contact.

Events that might cause stress include travelling, moving locations, changes in equine social groups, competitions or another illness.

In late pregnant mares, stressors can cause shedding or transmission of the

virus within the mare or to other mares, with the virus crossing the placenta to cause abortion.

### Steps to prevent an outbreak

- **Consider vaccination:** vaccines are available in the UK against EHV-1 and EHV-4. In breeding mares, vaccination is recommended at five, seven and nine months of pregnancy. Vaccination increases the level of immunity within the population against EHV, but, due to the nature of the virus with its inactive form among carriers, total protection is not possible.

While vaccination will not prevent individual animals aborting due to EHV infection, studies show that it may be beneficial in preventing abortion storms in addition to reducing the severity and duration of the disease if it does occur.

- **Broodmare management:** additional prevention measures should be undertaken on stud farms, alongside vaccination. Broodmares should be

managed in small groups with similar due dates, from early in their pregnancy. They should be kept at pasture as much as possible to avoid sharing the same airspace.

- **Foal at home:** if this is not an option, the mare should arrive at stud at least 28 days before her foal is due.

A pregnant mare should **not** travel with other horses. Those mares arriving from other studs or from the sales or abroad should be isolated for at least two weeks and regarded as high risk to the residential mare population. **H&H**

### ABOUT THE AUTHOR

EMMA HOUGHTON MRCVS of Endell Veterinary Group has a special interest in stud and internal medicine, and anaesthesia.

The Wiltshire-based practice is part of the XLEquine Veterinary Group.

- Visit [www.endellveterinarygroup.co.uk](http://www.endellveterinarygroup.co.uk) or call 01722 333291.