



## HERPES

Herpes virus is a common infection of horses and ponies. Thankfully, the majority of infections of Herpes Virus 1 and 4 (HV1 and 4) produce few symptoms, apart from what is commonly known as 'loss of performance' or mild respiratory infections similar to a common cold in humans. In horsey parlance this is known as 'The Virus'.

Unfortunately, herpes can also cause more nasty symptoms, including virus abortion in mares, and occasionally transient unsteadiness and incoordination because of its effect on the spinal cord. Sadly, sometimes this unsteadiness and incoordination can progress to the horse being paralysed, which may necessitate the horse being put down.

A serious outbreak of herpes virus did occur in the summer of 2003 and it has to be said there were some fatalities. However, to put matters into perspective, herpes virus, at some stage, will affect the majority of horses and ponies in the UK. Nationally there will be up to a dozen outbreaks of virus abortion a year, mostly involving single mares aborting, and we believe approximately fifteen horses and ponies died following the paralytic form of the disease in the summer of 2003, although this followed a period of many years when there had been no reports at all of this type of the disease.

Herpes is a virus which spreads relatively slowly, usually by direct contact between individuals. The most common route is via nose to nose contact associated with the infected discharges, although it is likely that persons can physically carry the infection on their clothes and associated with buckets and other items between horses. Aborted foals that are infected with herpes virus are a potent source of infection for other horses, but this of course will only rarely be a practical problem.

In the face of an outbreak, it is important to limit the spread of the infection by taking appropriate hygiene measures. This includes physical separation of horses, either individually or as groups depending on what is practical in the stable situation, utilising sensible hygienic precautions with regard to clothing etc., and avoiding sharing facilities such as troughs or feeding buckets etc. Buckets of disinfectant outside a stable are useful in avoiding trailing infected material around a stable yard, but it is usually nose to nose contact or careless transmission via buckets etc. that is the most common form of spread.

Unlike influenza virus, which spreads rapidly throughout a yard in a matter of one to two days and is a true airborne infection, herpes virus spreads gradually

around a premises. Of course, by the time herpes is detected in a yard, it is quite likely that there has already been some degree of infection between individuals. To discover the infectious status of individuals, it may be necessary to take blood samples to indicate exposure to the virus. Individual samples are of use in assessing the degree of spread of infection within a given stables and in individual horses, paired samples taken two weeks apart can indicate recent infection.

### Vaccination

While it is tempting to vaccinate horses, it is important to understand that herpes vaccines need to be administered every six months and are only really effective where the majority of the horses on any given premises are all vaccinated, i.e. to suppress the level of infection in the equine population. Pregnant mares are vaccinated even more frequently, roughly at one to two month intervals during pregnancy.

The problem with vaccinating in the face of an outbreak is that experience, particularly in the United States, has indicated that if horses are vaccinated that are already incubating the virus, i.e. that have recently been exposed to it, there is a small risk this may result in the formation of what are known as 'immune complexes' which can precipitate the paralytic form of the disease. This is the reason that vaccination is not usually recommended immediately in the face of an active outbreak of herpes, but more as a strategic tool to suppress virus activity in a yard.

When, therefore, do we vaccinate during an outbreak?

Horses coming onto an infected premises may be vaccinated to reduce the risk of contracting herpes. Two vaccines are required with an interval of not less than three, but not more than six, weeks apart, then there should be a minimum period of at least seven days, to allow response to the vaccine. Subsequently boosters are required at six monthly intervals or more frequently.

On a premises where isolation and hygiene precautions have been undertaken and there are paired blood samples at least two weeks apart, or a single negative blood sample two weeks after quarantine and isolation have been imposed, the vaccination regime above may then be undertaken, relaxing strict isolation only seven days after the second dose of vaccine