

Session 8 – FEI Veterinary Regulations – Full revision

The Chair of the Veterinary Committee, Dr Jenny Hall, opened the session and focused her introduction on whether or not the FEI should introduce a requirement for mandatory vaccination against EHV-1 and rules changes proposals for this year's full rules revision process. She also addressed her gratitude towards the equestrian community for hard work, collaboration and shown solidarity during last year's outbreak of neurological EHV-1 in Spain.

This session was aimed at clarifying on how to move on and how to guide the decision making process. There were two presentations, one by Dr Lutz Goehring and the other by The FEI Veterinary Director, Dr Göran Akerström.

I – Summary of the first presentation

Dr Lutz Goehring's presentation focused on EHV-1 'neurological herpes' (Equine Herpes Virus associated Myeloencephalopathy - EHM) and the role of vaccination in preventing this disease.

Key notes from his presentation:

Vaccines are available against EHV-1 and vaccination will help reducing EHM numbers in an outbreak but will not prevent an outbreak from happening.

Although EHV-1 primarily is a respiratory tract infection, viremia may lead to spinal cord-endothelial cell infection causing neurologic gait abnormalities: ataxia-dysmetria-paresis and paralysis.

The process begins with a respiratory tract infection with no visible signs of disease (localized infection), it is followed by an increase in temperature that is associated with viremia. After the temperature drops affected horses may start showing neurological clinical signs or abortion.

As with all biological data, it must be taken into consideration that biology is not an exact science.

Warmblood tall breeds are more susceptible to EHM than for example ponies. Female and increasing age are other significant risk factors.

EHM outbreaks are more common in November – April (winter and spring in the northern hemisphere) and are rare in the southern hemisphere.

The Infection follows a 3-tier cascade-like system:

1. Respiratory tract disease with shedding of virus
2. Colonization of lymphatics
3. Viremia leading to neurological form or abortion.

All steps are connected, interdependent and unidirectional.

If there is no viremia, there is no EHM. It is therefore important to monitor body temperatures - Fever of significance indicates viremia.



If there is less viral replication in the respiratory tract, than there will also be less shedding into the environment and less of a push towards viremia.

The quantity of the shedding (Infectious dose) and quality (droplet size) will affect the dynamics of an infection.

Although immunity builds up after vaccination (or previous infection), it will be affected by the quality and quantity (cellular immunity vs humoral immunity) and time factor since there is a natural decrease in immunity over time.

It is important to understand the concept of Infectious dose vs Immunity. Depending on the dose, the virus might cross the threshold for immunity and still infect the horse.

Thus, the goal in preventing infection is to keep immunity as high as possible.

Among the vaccines available worldwide, several have shown that there is reduced shedding and reduced or absent viremia, yet no vaccines label claims to prevent infection with EHM.

Only recently a model of infection has been developed to allow further studies on efficacy of EHV-1 vaccines.

Dr Goehring presented some EHV-1 vaccine efficacy studies, including an unpublished study where results indicate a modest reduction of EHM cases in the EHV-1 vaccinated population.

It is well established that the amount of virus horses have been exposed to is very important on whether they get contaminated or not. Contamination will be through direct-transmission (air-borne from horse to horse) and indirect transmission via fomites (animate/unanimated)

As a conclusion on how to prevent incursion and spread during an event, it was noted that this will not be through vaccination alone, it requires highest possible vaccine coverage (> 80-85%) together with compliance and pro-active thinking by stakeholders at an event following biosecurity measures.

II – Suggestions/comments received from the floor

It was asked what was Dr Goehring's recommendation to the FEI in terms of regulation regarding EHV-1 vaccine.

Dr Goehring believes that it makes it easier to have horses vaccinated, although always in association with other biosecurity measures

It was asked whether the FEI wants to mandate worldwide EHV-1 vaccination. The German National Federation will ask for compulsory vaccination as of next year and would welcome measures implemented worldwide. Would lack of vaccines worldwide be a challenge to implementation?

Jenny Hall pointed out that for the FEI, being a global organization, availability of vaccines worldwide has to be taken into consideration. Although similar challenges have been faced by Australia and New Zealand for influenza vaccination.

A comment was made stating that, although New Zealand had an outbreak at about 10 years ago, this was contained to a stud farm and there are currently has no EHM cases.



Dr Goehring highlighted that outbreaks usually occur at limited premises although there is always horses shedding from one facility to another, although this would be highly unlikely as soon as quarantine has been implemented. New Zealand has reported cases of abortions due to EHV-1 viremia, so there is the potential for having EHM cases, although numbers may be lower than in other parts of the world.

A comment from an athlete that has decided to vaccinate on annual basis referred to not having experience any reaction from the vaccination but would like to know if it is expected reactions similar to some experienced with influenza vaccines. What sort of percentage of reactions would be expected with EHV-1 vaccine?

Dr Goehring clarified that there are different vaccines. Inactivated vaccines tend to be less problematic. One out of 300 horses vaccinated with inactivated vaccine may experience some reaction. Horse vaccinated with modified live vaccine horse might experience some other reactions (anecdotic cases such as neuritis). In the USA, even with more recurrent vaccination (e.g. every 2 months) there is no reporting of a higher number of reaction cases.

Yves Rossier agreed that horses vaccinated frequently don't seem to experience more reactions, but suggested the percentage of FEI horses vaccinated should be valuable to know.

Jenny Hall suggested that this can be checked during next year through registration in passports

A representative from Zoetis informed that in European countries it is possible to download the summary of product characteristics. She also mentioned that only small swellings had been reported for EHV-1 vaccines. Dr Peter Kallings, SWE NF and also Chairman of European Horseracing Scientific Liaison Committee confirmed that, with their added experience on EHV-1 vaccination, there has not been any reports of reactions.

III – Summary of the second presentation

The FEI Veterinary Director, Dr Göran Akerström, presented on the aim of the rules in place for preventing sick horses from entering venues and measures to quickly react to positive cases. Some amendments may have to be introduced in order to improve the system:

On the topic of EHV-1 vaccination and whether mandatory vaccination would be efficient in protecting horses at FEI events against outbreaks of EHM, the lack of published science makes this problematic. Experts have different views and vaccination intervals lacks scientific evidence. Protection is mainly achieved by implementing strong biosecurity measures.

At the same time there are no substantial arguments/concerns against using vaccine.

In order to take a decision on whether EHV-1 vaccination should be mandated the FEI Veterinary Director suggested that a few alternatives could be discussed.

Either to.

1. Seek further input and keep the situation under review deferring any decision to the 2023 General Assembly
2. To propose mandatory vaccination with implementation in 2025



3. Other proposals.

Regardless of alternatives, the FEI plans to make a plan to fill in gaps in knowledge by encouraging institutions to conduct field studies and by increasing dialogue with vaccine developers/producers.

Jurisdiction is key to manage outbreaks and it is recommended that National Federations strengthen their jurisdiction on this matter.

It is also important the acceptance of the rules by the Equestrian Community and that everyone is taking individual responsibility. Dialogue with Athletes and Organizing Committees is extremely important to improve biosecurity knowledge.

Validated Education Material has been put forward by the FEI Solidarity Department to help improve knowledge on biosecurity measures to be put in place.

The sanctions related to the Horse Health Requirements will be revised to continue improving the system.

The FEI HorseApp is instrumental to implementation and control of biosecurity requirements and outbreak management. Further development of the FEI HorseApp is strategically important, including different features and modules.

Examination on Arrival is a critical tool in identifying horses with signs of infectious disease. The FEI Veterinary Department is looking at alternative methods for temperature taking.

Risk classification of events will allow to allocate resources to where they are most needed by using a Critical Control Points Format. Differences in between disciplines will be considered.

FEI Event inspections increases compliance and allows to provide advice to the organization.

There is the need to have temperature spot checks at events carried out by FEI Officials to control compliance with mandatory temperature monitoring.

Protocols for management of suspected cases have improved. When validated stable side tests are available the FEI should establish protocols for their use. There is also a proposal to create an Emergency Response Unit that will be funded by the FEI and made available to the National Federations in the event of an outbreak of a contagious disease.

The FEI will provide material to organizers and producers of permanent stables on details that can minimize the spread of infectious agents.

It was also discussed a proposal from British Equestrian regarding a change to the Equine Influenza Vaccination protocol in order to harmonize the vaccination requirements with other horse sports.

Finally there is a proposal to make a change to Article 1050 of the FEI Veterinary Regulations in order to, where possible, replace the Veterinary Delegate with a third Examining Veterinarian at the Final Limb Sensitivity Examination.



II – Suggestions/comments received from the floor

A Zoetis representative acknowledged that it is positive that the FEI will continue to collect data to help approach benefits of vaccination. She clarified that the interruption of delivery of vaccines was caused by the increase in demand caused by the outbreak. She added that, by having mandate or guidance, the FEI will help to solve any vaccine distribution issues. She also suggested that the availability of vaccines in countries without a commercial license should be possible to solve. In her view, clear guidelines are necessary so stakeholders have a clear way forward.

A Boehringer representative agreed that there is not much published data available and wants to make sure the FEI has all information that currently exists. A collaboration with FEI to design the studies was suggested. In order to increase investment the industry needs reassurance of result of this investment.

British Equestrian informed that their Infectious Disease Advisory Group is in favor of vaccination but not to make it compulsory. In their view, data is still required, including knowledge of the level of vaccination within the FEI Community. Regarding stable side testing – British Equestrian is very supportive of the idea and it should be carried out. On the Equine Influenza vaccination protocol topic, British Equestrian noted that this is not just about harmonization but also efficacy, bringing the protocol closer to manufacturer's advice and improving efficacy.

Jenny Hall closed the session looking forward for dialogue and feedback leading up to the General Assembly.