EIDS
Equine Infectious Disease Surveillance

GUIDANCE ON NAVIGATING THE 2025 EQUINE BREEDING SEASON WITHOUT ARTERVAC EVA VACCINE

NOVEMBER 2024:
The following guidance has been compiled by Equine Infectious Disease Surveillance (EIDS), based at the University of Cambridge.
EIDS collaborates with equine industry stakeholders to control infectious diseases in the UK by providing disease control advice services for veterinary surgeons.

IMPORTANT NOTE: This proposal only applies where stallions have been previously vaccinated with Equip Artervac (Zoetis) in full accordance with the datasheet, prior to lapsing due to non-availability of the product since 29 March 2023.

INTRODUCTION

While equine viral arteritis (EVA) is not currently believed to be actively spreading in the UK, it is endemic in several European countries and can be transmitted through respiratory, venereal, or indirect means. The Horserace Betting Levy Board (HBLB) International Codes of Practice (CoP) provide a useful overview on EVA (https://codes.hblb.org.uk/index.php/page/30) and outline the standards to which the breeding industry should operate to prevent, diagnose and control EVA, including the adoption of vaccination of stallions and teasers.

OVERVIEW

This document provides Defra-approved guidance for the equine breeding industry in light of the latest non-availability of Artervac EVA vaccine for use in stallions for the upcoming 2025 breeding season. In summary, there are two issues that need to be addressed:

1. Seropositive stallions with lapsed vaccination records that under the EVA Order 1995 would require investigation to confirm that they are not positive for EAV in their semen, will need to be cleared as safe to breed.
2. In the absence of Artervac, vaccine induced protection among stallions reduces over time resulting in increased vulnerability if exposed to the virus and so enhanced measures to reduce the risk of them contracting EVA should be adopted where feasible.

1 PROVIDING CLEARANCE FOR SEROPOSITIVE LAPSED VACCINATED STALLIONS

DECISION TREE

A proposed decision tree to determine the appropriate course of action and associated laboratory tests to be applied to lapsed vaccinated stallions and teasers has been designed (Figure 1).

The rationale behind these decisions is discussed below:

- Less frequently vaccinated stallions may have reverted to a seronegative status when tested serologically after 1st January 2025 and will be considered free from EAV and will require no further action.
- Well vaccinated stallions will be expected to remain seropositive for a prolonged period after the last Artervac vaccine dose and will need to demonstrate freedom from EAV exposure and/or viral shedding.
- Some, mainly Thoroughbred stallions, have serum samples stored that were taken several weeks after the last dose of Artervac was administered as per previous advice. These samples would have coincided with likely peak vaccination antibody levels, which in the absence of infectious challenge with EAV during the intervening period would be expected to decline or remain stable with time since vaccination (i.e. no seroconversion is evident). Absence of seroconversion on virus neutralisation (VN) antibody testing of these samples paired with routine pre-breeding samples taken in early 2025 would provide evidence for non-exposure to EAV. The Department for Environment, Food and Rural Affairs (Defra) continues to be happy to endorse this approach as previously proposed.

Some vaccinated stallions have serum samples stored but these do not comply with the recommended peak antibody response sampling interval (<50 days) after last vaccination and so will not provide adequate assurance if subject to paired antibody testing. In addition, there are an unknown number of vaccinated stallions that do not have serum samples stored with which to show an absence of seroconversion. Therefore, alternative clearance criteria will need to be applied to stallions in these two groups if they test seropositive on pre-breeding samples taken in early 2025.

For stallions that are used for artificial insemination, there is the option to have their semen collected and tested by PCR to demonstrate freedom from EAV. However, this option is not so readily applicable for Thoroughbred stallions and others that are similarly not trained for semen collection. As an alternative it is proposed that the first three seronegative mares covered by vaccinated seropositive stallions that have not been serologically cleared as above, be serologically tested several weeks after mating. Seronegative results in all three mares would confirm that there was no EAV semen shedding, which would be considered equivalent to a negative PCR test applied to semen.

1 PROVIDING CLEARANCE FOR SEROPOSITIVE LAPSED VACCINATED STALLIONS

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FIGURE 1: Decision tree to determine the appropriate diagnostic tests for a lapsed vaccinated stallion

2 REDUCING EVA RISKS IN THE UK EQUINE POPULATION

REDUCING RISKS

The recommendations for prevention outlined in the HBLB International Code of Practice for EVA should be strictly adhered to, with particular caution with regard to imported mares and stallions, including Sports horse stallions and their use in artificial breeding practices.

Consider introducing additional EVA pre-breeding serological testing of mares within a shorter interval before covering rather than on a single occasion soon after 1st January 2025 - the closer this further sampling is to covering provides the best (but not 100%) assurance that a stallion may not be exposed to a recently infected mare. Retaining the earlier serological testing of mares provides assurance at the population level that there was no EVA activity the previous breeding season. An alternative to an additional test closer to covering is to delay the post-January test to a pre-breeding serological test within a shorter interval before covering.

Consider introducing additional EVA post-breeding season testing of stallions, with samples paired with those collected pre-breeding after 1st January 2025 to confirm that there have been no seroconversions in the absence of Artervac vaccination.

Contact us

For any further inquiries or clarifications regarding the information presented in this document, please contact Equine Infectious Disease Surveillance

01223 766496

www.equinesurveillance.org

equinesurveillance@vet.cam.ac.uk

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