

EQUINE VIRAL ARTERITIS (EVA) REGULATIONS AND RECOMMENDATIONS

FOR 2023

NEW YORK STATE THOROUGHBRED BREEDING INDUSTRY

I. General

EVA is an official reportable disease in New York State. Studies at the New York State College of Veterinary Medicine, Cornell University and at the University of Kentucky have shown that up to 50% of naturally infected seropositive EVA breeding stallions will shed virus in their semen thereafter. Breeding these shedding stallions to seronegative broodmares may result in EVA outbreaks and seroconversion of mares. Farms found to have EVA outbreaks in any breed of horse will be quarantined by the NYS Department of Agriculture and Markets, Division of Animal Industry. Veterinarians are required to report any EVA outbreaks in all breeds of horses in New York State to the Division of Animal Industry. **Only Thoroughbred breeding stallions with known documented official EVA status for the 2023 breeding season will be registered by the New York State Thoroughbred Breeding and Development Fund.** All test results and vaccination certificates must be provided to the New York State Thoroughbred Breeding and Development Fund for registration. Your veterinarian can access all test charts and vaccination forms through the Animal Health Diagnostic Center, New York State College of Veterinary Medicine, Cornell University, Ithaca, NY 14853 (607-253-3931 or online at <https://ahdc.vet.cornell.edu/test/Index.aspx>). Forms are also available on our website – www.NYBreds.com – under “Registration” -> “Mail-In Forms.” Further inquiries can be made to Tracy Egan, New York State Thoroughbred Breeding and Development Fund, 1 Broadway Center – first floor, Schenectady, NY 12305 (518-388-0174). **All blood testing for this official program must be conducted at the Diagnostic Laboratory, New York State College of Veterinary Medicine, Cornell University, Ithaca, NY.** Testing, vaccinations, and accredited veterinary services for these procedures are at the owner’s expense and will not be incurred by the New York State Thoroughbred Breeding and Development Fund, New York Thoroughbred Breeders, Inc., New York State Department of Agriculture and Markets, Division of Animal Industry, or Diagnostic Laboratory at the New York State College of Veterinary Medicine.

II. New Breeding Stallions From Within New York State

All Thoroughbred breeding stallions new to the program must be blood-tested and an official EVA form completed and submitted to the Diagnostic Laboratory at the NYSCVM with the blood sample for EVA status prior to registration for the 2023 breeding season by the New York State Thoroughbred Breeding and Development Fund.

- X a. Seronegative stallions may be vaccinated within 30 days of blood testing or may be registered as non-vaccinated seronegative stallions. The official forms must be sent to the New York State Thoroughbred Breeding and Development Fund. Vaccination must take place at least 21 days prior to breeding.
- X b. Seropositive stallions (those showing a positive titer of 1:4 or greater for EVA) must be tested for evidence of shedding EVA virus in their semen by one of the following procedures:

Under the direction of an accredited veterinarian, the stallion must be bred a minimum of two times per day for two to four days to each of two seronegative test mares. These test mares shall be isolated from all other equine species and blood-tested on day 14 and day 28 following the last cover. If neither of the test mares shows signs of EVA and if each test mare remains seronegative following the 28-day test, the stallion shall be considered a A non-shedder and allowed to be registered.

OR

Under the direction of an accredited veterinarian, a semen sample is collected, placed on ice, and forwarded to the Diagnostic Laboratory by overnight courier. The laboratory must be alerted of the collection prior to shipment. Alternatively, the semen sample can be frozen immediately upon collection and forwarded frozen to the Diagnostic Laboratory. Laboratory personnel will assess the quality of the sample. If no or a very low sperm count is evident, a new sample will be required for testing. The semen sample will be tested for the presence of virus either by a virus isolation test or polymerase chain reaction (PCR) test, at the discretion of the laboratory personnel. If virus is not found in the semen sample, the stallion will be considered a A non-shedder and allowed to register. However, blood samples from the first two seronegative mares bred to this stallion taken at 14 and 28 days post-breeding must be submitted to the Diagnostic Laboratory for EVA antibody testing.

If any test mare shows signs of this disease and/or if any mare seroconverts, the stallion shall be considered a A shedder and shall be registered as such. This stallion will be housed separately from seronegative stallions and broodmares, and will be allowed to breed only to seropositive mares. All shedding stallions will be quarantined by the Division of Animal Industry, NYS Department of Agriculture and Markets.

- X c. Thoroughbred breeding stallions that have been vaccinated previously in another state must have official documentation showing a seronegative EVA status from a USDA-certified laboratory within 30 days of the initial vaccine, or be found seronegative for EVA through blood testing prior to re-vaccination. Stallions that are seropositive and cannot provide official papers of previous seronegative status within 30 days of initial vaccination must be tested for evidence of shedding the virus as outlined in section II b. Only seronegative or officially documented vaccinates or non-shedding seropositive stallions can be vaccinated.

III. New Stallions Imported to New York State

1. All Thoroughbred breeding stallions imported into New York State must be blood-tested for EVA status by requirement of the NYS Department of Agriculture and Markets, Division of Animal Industry prior to entry. No EVA seropositive Thoroughbred breeding stallion will be allowed to be imported into New York State until having been tested for a shedding of virus in the state of origin, as outlined in section II b. Only seronegative-certified, EVA-vaccinated (officially tested seronegative within 30 days of receiving initial vaccine), or seropositive non-shedding Thoroughbred breeding stallions will be allowed to be imported into New York State. Those that are found to be seropositive and pass the non-shedding test in the state of origin will be quarantined by the Division of Animal Industry, NYS Department of Agriculture and Markets and re-tested for shedding on the New York State farm where that stallion will stand. This stallion cannot be removed from that farm without permission from the Division of Animal Industry, NYS Department of Agriculture and Markets.

IV. Stallions Registered in 2023

1. All Thoroughbred breeding stallions that were seronegative in the 2022 breeding season and not vaccinated for EVA must be blood-tested and an official form completed for EVA status prior to registration for the 2023 breeding season by the New York State Thoroughbred Breeding and Development Fund. Vaccination must take place at least 21 days prior to breeding.

2. All previously vaccinated Thoroughbred breeding stallions are to be re-vaccinated at least 21 days prior to breeding. An official vaccination form must be submitted to the New York State Thoroughbred Breeding and Development Fund. No blood test is required (pre- or post-vaccination) except as indicated in 3 below.

3. Seropositive non-shedding Thoroughbred stallions from the 1987-2021 seasons must be rebled and tested for current EVA status. These stallions will not require test breeding to seronegative mares prior to the 2023 breeding season, but the first two seronegative mares bred to the stallions in the 2023 breeding season must be tested at 14 and 28 days post-breeding for EVA blood titer status for any evidence of shedding virus.

V. Seropositive EVA Shedding Thoroughbred Breeding Stallions for 2021 or Prior Years

1. Seropositive EVA shedding Thoroughbred breeding stallions will be placed or remain under quarantine on their residing farm by the NYS Department of Agriculture and

Markets, Division of Animal Industry, and the breeding season managed under their control measures. It is recommended that known EVA shedding thoroughbred stallions from the 1987-2021 seasons be test bred to one or two seronegative test mares prior to the 2023 breeding season, or that semen be submitted to the New York State Veterinary Diagnostic Laboratory for Virus Isolation to determine whether shedding has continued. Only seropositive mares or vaccinated mares (EVA-vaccinated 21 days prior to breeding) will be allowed for breeding to EVA shedding stallions. Only newly vaccinated broodmares require a 21-day post-breeding isolation on the farm of origin. Broodmares with natural EVA titers or those vaccinated for EVA and bred to an EVA shedding stallion from 1987 to 2021 do not require post-breeding isolation.

VI.

Vaccine

1. In the New York State Thoroughbred program, officially licensed EVA vaccine can be used only on seronegative horses or those previously officially vaccinated for EVA (certified seronegative within 30 days of the initial vaccination), or on non-shedding seropositive stallions.

Recommendations

1. Monthly testing is recommended for EVA seronegative thoroughbred stallions during the 2023 breeding season, and at least 28 days after the last breeding of the season for EVA blood status.
2. Vaccination of all seronegative breeding stallions at least 21 days prior to breeding is recommended.

Conclusion

The above regulations and recommendations have been continued in order to control the spread of EVA in the New York State breeding population via the shedding of this virus in the semen of stallions. To date, these measures have been an effective control in preventing new EVA infections in the NYS Thoroughbred breeding population.

These regulations are approved by the New York Equine Health Council, New York State Thoroughbred Breeding and Development Fund, New York Thoroughbred Breeders, Inc., and the Division of Animal Industry, New York State Department of Agriculture and Markets.