

**TITLE 21      AGRICULTURE AND RANCHING**  
**CHAPTER 30   ANIMALS AND ANIMAL INDUSTRY GENERAL PROVISIONS**  
**PART 7        EQUINE VIRAL ARTERITIS (EVA)**

**21.30.7.1      ISSUING AGENCY:** New Mexico Livestock Board; 300 San Mateo NE, Suite 1000; Albuquerque, New Mexico 87108; Telephone (505) 841-6161.  
[21.30.7.1 NMAC - N, 7-15-05]

**21.30.7.2      SCOPE:** All owners, transporters or handlers of equine or equine semen in the State of New Mexico and those that apply to bring equine or equine semen into the state for any reason. All accredited veterinarians handling EVA vaccine.  
[21.30.7.2 NMAC - N, 7-15-05]

**21.30.7.3      STATUTORY AUTHORITY:** Section 77-2-7, A, F, H, NMSA 1978.  
[21.30.7.3 NMAC - N, 7-15-05]

**21.30.7.4      DURATION:** Permanent.  
[21.30.7.4 NMAC - N, 7-15-05]

**21.30.7.5      EFFECTIVE DATE:** July 15, 2005, unless a later date is cited at the end of a section.  
[21.30.7.5 NMAC - N, 7-15-05]

**21.30.7.6      OBJECTIVE:** To establish restrictions to protect the equine industry of the state of New Mexico. Clinical disease due to EVA infection is a reportable disease to the New Mexico state veterinarian. Equine viral arteritis (EVA) is an infectious contagious disease of horses caused by the equine arteritis virus (EAV). EVA is of special economic concern because it can result in abortion in pregnant mares, illness and death in young foals and the establishment of the carrier state in stallions. Further, to prevent the introduction of EAV and control subsequent spread of EAV within New Mexico.  
[21.30.7.6 NMAC - N, 7-15-05]

**21.30.7.7      DEFINITIONS:**

**A.      “Accredited veterinarian”** means a veterinarian approved by the deputy administrator of USDA-APHIS-VS in accordance with provisions of Part 161, Title 9, Code of Federal Regulations (CFR). An accredited veterinarian is pre-approved to perform certain functions of federal and cooperative state-federal programs.

**B.      “Animal and Plant Health Inspection Service (APHIS)”** means the agency providing leadership in ensuring the health and care of animals and plants. The agency improves agricultural productivity and competitiveness and contributes to the national economy and public health.

**C.      “Approved Laboratory”** means a state, federal or private diagnostic laboratory that must be approved for EVA testing by the UDSA-AHPIS-VS.

**D.      “Approved laboratory tests”** means laboratory tests for the diagnosis of EVA infection that are approved by the Office of International des Epizooties (OIE) and UDSA-AHPIS-VS.

**E.      “Area veterinarian in charge (AVIC)”** means the veterinary official of USDA-APHIS-VS, who is assigned by the deputy administrator of VS to supervise and perform the official animal health work of APHIS in the states or states concerned.

**F.      “Board”** means the New Mexico livestock board.

**G.      “Book or booking”** means the contracting or scheduling of a mare to breed to a stallion by natural service.

**H.      “Carrier”** means a clinically normal stallion that sheds EAV continuously in its semen.

**I.      “Certificate”** means an official document issued by the chief livestock health official or a VS representative or accredited veterinarian at the point of shipment of equine. It includes all of the following:

(1) The description, including age, breed, color, sex, distinctive markings or unique and permanent forms of identification, when present (e.g. brands, tattoos, EID, scars or blemishes), of each of the restricted equine to be moved;

(2) the number of restricted equine covered by the document;

(3) the purpose for which the equine are to be moved;

- (4) the points of origin and destination;
- (5) the consignor; and
- (6) the consignee.

**J.** “**Certificate of veterinary inspection (CVI)**” means the form issued by the state of origin that records the consignor, consignee, identity, origin, destination and health status of animals, issued by an accredited veterinarian of that state. It is commonly known as a health certificate.

**K.** “**Chief livestock health official**” means the state veterinarian of New Mexico.

**L.** “**Commercial stallion**” means a stallion that is utilized for breeding mares owned by someone other than the owner of the mare(s).

**M.** “**Cover**” means the act of breeding a stallion to a mare.

**N.** “**Director**” means the executive director of the New Mexico livestock board.

**O.** “**Electronic identification device (EID)**” means an electronic implant with a transponder, inserted into the nuchal ligament of an equid. The transponder contains an approved 15 digit number that uniquely corresponds to a specific equine

**P.** “**Equine arteritis virus (EAV)**” means the organism which causes the disease equine viral arteritis.

**Q.** “**Equine**” means any animal in the family equidae, including horses, asses, mules, ponies and zebras.

**R.** “**Equine viral arteritis (EVA)**” means an infectious communicable disease in equine.

**S.** “**Exposed animals**” means animals in the family equidae that have been exposed to EAV by reason of associating or commingling with equine known to be infected with the virus.

**T.** “**Herd**” means all animals of the family equidae, such as horses, asses or zebras:”

(1) Under common ownership or supervision that are:

(a) grouped on more than one or more parts of any single premises (lot, farm or ranch);or

(b) on two or more premises that are geographically separated but between which equine have been interchanged or had contact with equine from the other premises. It will be assumed that contact between animals of the family equidae on the different premises has occurred unless the owner can establish otherwise and the results of the epidemiologic investigation are consistent with the lack of contact between the premises; or

(c) on common premises, such as community pastures or grazing association units, but owned by different persons. Other groups of equine owned by the persons involved that are located on the other premises are considered to be part of a herd unless epidemiologic investigation establishes that the equine from an affected herd have not had the opportunity for direct or indirect contact with equine from that specific premises.

**U.** “**Herd of origin**” means a farm or ranch or other premises where equine were born or where they have been kept for 30 days or more before the date of shipping. For the purpose of these regulations, herd of origin has the same meaning as place of origin, premise of origin, farm of origin and ranch of origin.

**V.** “**Identification**” means any modality that provides a unique and permanent identification of an individual equine.

**W.** “**Mare**” means the intact female of the equine species.

**X.** “**Nurse mare**” means a mare that has lost her foal and has adequate milk for supplementing an orphaned foal.

**Y.** “**Office Internationale des Epizooties (OIE)**” means the world organization for animal health

**Y.** “**Official seal**” means a serially numbered metal or plastic strip, consisting of a self-locking device on one end and a slot on the other end that forms a loop when the ends are engaged. An official seal is tamperproof and cannot be reused if opened. It is applied to the doors of a transport vehicle by a representative of APHIS AVIC or the chief livestock health official. A serially numbered, self-locking button that cannot be reused may be substituted for the metal or plastic strip type of seal.

**Z.** “**Official test**” means the virus neutralization and virus isolation test in cell culture are the official laboratory procedures currently employed for the diagnosis of EAV infection. The procedures are described in the OIE Manual of Standards for Diagnostic Tests and Vaccines.

**AA.** “**Owner**” means any person with the legal right of possession or having legal control over any equidae and shall include but not limited to agents, caretakers and other persons acting on behalf of that person.

**BB.** “**Permit**” means an official document (VS form 1-27 or comparable state form) issued by the chief livestock health official, federal representative or by an accredited veterinarian. The permit must accompany all EAV carrier stallions and those EVA exposed equine being moved under official seal to a specified destination.

**CC.** “**Quarantine**” means the act of placing exposed or infected animals into isolation from other animals to prevent the transmission of an infection.

**DD.** “**Quarantined area**” means a confined area under the direct supervision and control of chief livestock health official or federal animal health official who establishes procedures for the monitoring and recording of all animals entering or leaving the area. All equine under EVA quarantine are considered to have been exposed to EAV.

**EE.** “**Polymerase chain reaction test (PCR)**” means a test to detect EAV in samples.

**FF.** “**Reactor**” means any horse, ass, mule, pony or zebra that has been subjected to an officially approved laboratory test that is confirmed positive for antibodies to EAV.

**GG.** “**Reference laboratory**” means the national reference laboratory for the serological testing of EAV infection is the diagnostic virology laboratory in Ames, Iowa, a part of USDA-APHIS-VS’ National Veterinary Services Laboratories (NVSL). As designated by OIE, the international reference laboratory for all laboratory tests for EAV infection is the M.H. Gluck Equine Research Center at the University of Kentucky in Lexington, Kentucky.

**HH.** “**Semen**” means secretion or ejaculate from the reproductive organs of a stallion containing spermatozoa and seminal fluid from the accessory sex glands.

**II.** “**Sero-conversion**” means the development of neutralizing antibodies to EAV in response to natural infection with EAV or to the administration of EVA vaccine.

**JJ.** “**Sero-negative**” means a horse that has a serum neutralizing antibody titer of 1:4 to EAV using the virus neutralization test.

**KK.** “**Sero-positive**” means a horse that has a serum neutralizing antibody titer of 1:4 or greater to EAV using the virus neutralization test.

**LL.** “**Shedder or shedding**” means an equine has been determined to have EAV in its body. Specifically a term used to refer to a carrier stallion that has been determined to have EAV present in his semen and is capable of transmitting the infection to other equine through the act of breeding either by natural service or the use of artificial insemination.

**MM.** “**Standard insemination volume**” means 10 ml of semen.

**NN.** “**Teaser stallion**” means the intact male equid utilized in equine reproduction to aid in determination of estrus in a mare.

**OO.** “**United States Department of Agriculture (USDA)**” means, a federal agency charged with protecting American agriculture.

**PP.** “**Vaccinated or vaccination**” means an equine has been vaccinated with an approved EVA modified virus vaccine and for which the vaccination status has been kept current in accordance with the manufacturer’s recommendation.

**QQ.** “**Vaccinated sero-positive stallion**” means a stallion that was sero-negative prior to receiving a vaccine for EVA that demonstrates a sero-positive titer post vaccination.

**RR.** “**Veterinary Services (VS)**” means the animal health arm of APHIS, VS protects and improves the health, quality and marketability of our nations animals, animal products and veterinary biologicals by preventing, controlling or eliminating animal disease and monitoring and promoting animal health and productivity.

**RR.** “**VS form 1-27**” means an official restriction of livestock movement. This form is issued by a regulatory veterinarian and specifies the owner, owner’s address, owner’s telephone, premises affected, number, breed, age, sex, positive unique individual identification and destination of animals included.

**SS.** “**Virus isolation test**” means isolation of EAV should be attempted in cultures of the RK-13 cell line (ATCC CCL37). Suspensions of appropriate tissues or fluid specimens from suspect cases of EAV infection are inoculated onto monolayer cultures of RK-13 cells either in 25-cm<sup>2</sup> flasks or multi well plates in accordance with the procedures prescribed in the OIE Standards Manual for Diagnostic Tests and Vaccines. Inoculated cultures are incubated 5 to 7 days at 37°C and examined microscopically for viral cytopathic effect. In the absence of visible cytopathic changes, culture supernatants are subculture onto fresh cell monolayer and incubated for an equivalent period of 37°C. The identity of any virus isolated must be confirmed using reference EAV antiserum.

**TT.** “**Virus neutralization test (VN)**” means an assay for determining serum neutralizing antibodies to a particular virus, in this case EAV. Serial twofold dilutions of serum are tested against a standard quantity of an approved reference strain of EAV. The antibody titer is expressed as the highest serum dilution that neutralizes seventy-five percent (75%) of the standard quantity of virus. An antibody titer of 1:4 or greater is considered positive in the EVA VN test.

[21.30.7.7 NMAC - N, 7-15-05]

**21.30.7.8 INCORPORATION BY REFERENCE OF FEDERAL UNIFORM METHODS AND RULES AND OIE MANUAL OF STANDARDS FOR DIAGNOSTIC TESTS AND VACCINES:** The USDA Uniform Methods and Rules, APHIS 91-55-075 and the OIE Manual of Standards for Diagnostic Tests and Vaccines are incorporated by reference as presently in effect and as they may later be modified.  
[21.30.7.8 NMAC – N, ]

**21.30.7.9 GENERAL EVA INFORMATION:**

**A.** All laboratory samples, pertaining to this rule, shall be submitted by an accredited veterinarian to an approved laboratory.

**B.** All commercial breeding stallions shall be tested for EAV prior to use as a breeding stallion or collection for artificial insemination.

**C.** All semen (fresh or frozen, imported semen or semen for export) from uncertified stallions shall test negative by virus isolation or PCR prior to being used for artificial insemination.

**D.** All commercial breeding stallions shall be tested within 180 days prior to the breeding season or sooner, if indicated.

[21.30.7.9 NMAC - N, 7-15-05]

**21.30.7.10 COMMERCIAL BREEDING STALLIONS:** All commercial breeding stallions shall be registered annually with the New Mexico livestock board, where the current EAV status shall be recorded. It is recommended that all commercial breeding stallions be permanently identified either by brands, EID, tattoos or photographs.

[21.30.7.10 NMAC - N, 7-15-05]

**21.30.7.11 IMPORTATION OF STALLIONS:**

**A.** No commercial breeding stallion shall be imported into New Mexico for breeding purposes unless found serologically negative to an EVA test (serum neutralization) within 30 days prior to importation or serologically negative prior to vaccination and subsequently proven not a shedder of the disease. The results of these tests must be attached to the interstate CVI.

**B.** Positive EAV stallions may be imported into New Mexico or moved within the state on a permit issued by the office of the state veterinarian and may be subject to quarantine. Official laboratory serum and semen culture results shall accompany the interstate CVI. In addition, the consignee shall be advised of the stallion's EAV status and consents to shipment. Imported stallions shall be registered annually with the New Mexico livestock board.

[21.30.7.11 NMAC - N, 7-15-05]

**21.30.7.12 EXPORTATION OF EAV CARRIER STALLIONS:** Commercial stallions to be exported outside of New Mexico must have consent of the state of final destination and consent of the farm owner receiving the stallion

[21.30.7.12 NMAC - N, 7-15-05]

**21.30.7.13 SEMEN AND EMBRYO IMPORT AND EXPORT:**

**A.** Fresh, cooled or frozen semen shall be culture negative for EVA within 180 days or sooner of import. An official semen import certificate completed by an accredited veterinarian accompanied by the official laboratory culture test shall be sent to the office of the state veterinarian 7 days prior to the first importation of semen for the current breeding season. Fresh, cooled or frozen semen or embryos from a shedding stallion shall only be used on vaccinated or sero-positive mares. These mares shall be isolated for 21 days following insemination or implantation.

**B.** EVA positive semen shall only be allowed by state permit through the office of the state veterinarian. In addition, release documentation of informed consent is required from the farm owner stating they will accept EVA positive semen.

[21.30.7.13 NMAC - N, 7-15-05]

**21.30.7.14 EVA SHEDDING STALLIONS:**

**A.** A stallion is considered to be a shedder if any of the following apply;

- (1) the virus can be cultured from his semen; or
- (2) if the virus can be detected in his semen by PCR test; or

(3) if sero-negative mares seroconvert to sero-positive status following breeding or insemination.

**B.** A stallion known to be shedding EAV shall not be permitted to breed or be collected for artificial insemination until the state veterinarian determines that the stallion does not pose a risk of transmitting EVA. In making this determination, the state veterinarian shall consider whether the requirements of paragraphs 2 and 3 of this subsection will be complied with by the premises on which the shedding stallion is located. The following restrictions shall apply to a shedding stallion that is permitted to breed or be collected for artificial insemination:

(1) The owner or agent of an EAV shedding stallion shall notify in writing, the owner or agent of a mare booked or seeking to book a mare to that stallion which has been classified as an EAV shedder. A written copy of the booking confirmation shall be sent to the state veterinarian;

(2) A shedding stallion shall be housed, handled and bred or collected for artificial insemination in a facility isolated from non-shedding stallions.

(3) A shedding stallion shall be bred to a mare(s) that:

(a) have been vaccinated against EVA at least 21 days prior to being bred; or

(b) demonstrate an existing EVA titer from vaccination or natural exposure to EAV, if the serological EVA test was performed at least 28 days prior to date of breeding.

(c) A mare shall be isolated for 21 days after being covered by a shedding stallion.

[21.30.7.14 NMAC - N, 7-15-05]

#### **21.30.7.15 SERO-POSITIVE NONSHEDDING STALLIONS:**

**A.** A stallion may be considered to be a vaccinated sero-positive stallion if a blood sample collected within 10 days prior to administration of an approved vaccine was negative for antibodies against EAV. See Section 21.30.7.18 NMAC for recommended vaccination protocols.

**B.** It is required that a sero-positive vaccinated stallion that did not have an EVA negative test prior to vaccination comply with one of the following testing procedures to ensure that the stallion is not at risk of transmitting the virus.

(1) A standard insemination volume (10ml) of semen should be collected and either cultured for EAV or evaluated using a PCR test; or

(2) the stallion should be bred to two mares negative for EAV antibodies. The two mares shall be isolated from other equine for 28 days and have blood collected for an EVA test 28 days after breeding or artificially inseminated from two ejaculates, separately collected.

(3) The sero-positive stallion would be considered a non-shedder if the semen culture, semen PCR or test breeding results are negative.

**C.** A stallion may be considered a non-vaccinated sero-positive stallion, if the stallion has sero-converted following a natural exposure to the virus. It is recommended that a non-vaccinated sero-positive stallion be tested as outlined below prior to breeding to ensure that he is not at risk of transmitting the virus.

(1) Semen should be collected and either cultured for EAV or evaluated using a PCR test; or

(2) the stallion should be bred to two mares negative for EAV antibodies. The two mares shall have blood collected for an EVA test 28 days after breeding or artificially inseminated. The two mares shall remain isolated from other equine for 28 days following breeding.

(3) The sero-positive stallion would be considered a non-shedder if the semen culture, semen PCR or test breeding results are negative.

**D.** A stallion previously classified as a shedding stallion may be reclassified as a non-shedding stallion if the following criteria are met:

(1) during the first breeding season following the stallion's classification as a non-shedder, the first five sero-negative mares bred or artificially inseminated using semen collected from separate ejaculates from this stallion shall be test negative to a blood sample collected for an EVA test 28 days after breeding or artificial insemination.

(2) During the second breeding season, the stallion shall be bred to two mares negative for EAV antibodies that will be tested 28 days after breeding or have its semen collected and cultured negative for EAV or have the semen tested negative by PCR for EAV. If the semen culture report or PCR test and blood samples are negative for EAV, there shall not be restrictions placed on a future breeding season.

**E.** The final determination that a stallion is not an EAV shedder shall be made based on scientific procedures described in this section and approved by the state veterinarian. Until this determination is made, the stallion shall be considered an EAV shedder.

[21.30.7.15 NMAC - N, 7-15-05]

**21.30.7.16 REQUIREMENTS FOR BREEDING MARES TO A SHEDDING STALLION:**

- A.** The following guidelines are required when breeding mares to a stallion shedding EAV:
- (1) If a sero-negative mare is to be bred to a shedding stallion for the first time:
    - (a) it is required that the mare be vaccinated a minimum of 21 days prior to the first breeding or artificial insemination by a EAV shedding stallion and subsequently isolated a minimum of 21 days after the breeding or artificial insemination.
      - (i) During isolation, the mare shall be physically separated from other equine in a separate isolation area approved by the state veterinarian or designated personnel.
      - (ii) After the isolation period, the mare may move without restriction.
- B.** Mares that have been vaccinated against EAV or have been bred to an EAV shedding stallion within the previous two years may be re-bred to a shedding stallion, but should be isolated for a minimum of 21 days after breeding, as noted in subsection A.
- C.** When a mare bred to a shedding stallion is returned to the premises of origin within 21 days of breeding, it shall be in a transport vehicle or trailer by herself or with other sero-positive horses. Upon returning to the premises of origin, the transport vehicle or trailer and equipment used to move the mare must be immediately cleaned and disinfected according to procedures approved by the state veterinarian.
- [21.30.7.16 NMAC - N, 7-15-05]

**21.30.7.17 ACTIONS FOR NEWLY DIAGNOSED SERO-POSITIVE STALLIONS:** A stallion infected with EAV during the breeding season shall immediately cease breeding or immediately cease having semen collected for artificial insemination or semen collected and stored for future use. Since EVA is a reportable disease in the state of New Mexico, the state veterinarian must be immediately notified in the event of clinical EVA disease demonstrated by a positive laboratory test of serum or semen. An owner or agent with a mare booked or bred to a stallion that became infected with EAV during the breeding season shall be immediately notified in writing by the stallion's owner or agent, that the stallion is an EAV shedder. A copy of the written notification shall be sent to the state veterinarian. A stallion infected with EAV during the breeding season shall be classified as an EAV shedder and shall be handled according to the requirements of this rule. Following the stallions classification as a shedder, the state veterinarian may reclassify the stallion as a non-shedder in accordance with this rule.

[21.30.7.17 NMAC - N, 7-15-05]

**21.30.7.18 EAV EXPOSED MARES:** Veterinarians, owners, agents, handlers and transporters of equine shall refer to USDA APHIS 91-55-075, Equine Viral Arteritis, Uniform Methods and Rules and subsequent revisions.

[21.30.7.18 NMAC - N, 7-15-05]

**21.30.7.19 EQUINE VACCINATED AGAINST EVA:** Veterinarians, owners, agents, handlers and transporters of equine shall refer to USDA APHIS 91-55-075, Equine Viral Arteritis, Uniform Methods and Rules and subsequent revisions. Additionally, the following are the requirements for mares or stallions to be vaccinated with EVA vaccine in New Mexico:

- A.** EVA vaccine will be issued to federally accredited New Mexico licensed veterinarians by written request through the state veterinarian.
- B.** Testing of stallions for antibodies in blood or evidence of EAV in semen shall be submitted to an approved veterinary laboratory.
- C.** Stallions vaccinated for the first time against EVA shall be test negative to a blood sample collected by an accredited veterinarian prior to vaccination.
- D.** Stallions vaccinated for the first time against EVA shall have the EVA vaccine administered by an accredited veterinarian within 10 days after the sample collection date.
- E.** An official certificate documenting that the stallion has been vaccinated by an accredited veterinarian shall be sent to the state veterinarian within 7 days of the vaccination date. The original laboratory EVA test results shall accompany the certificate.
- F.** The EVA vaccination certificate for stallions shall be on a form prescribed by the state veterinarian.
- G.** All equids vaccinated for the first time against EVA shall not have direct exposure to an EVA affected animal or pregnant mare for 28 days after vaccination.
- H.** A vaccinated stallion shall not be used for breeding or artificial insemination within 28 days after vaccination. A vaccinated mare shall not be bred within 21 days of vaccination.

**I.** A sero-negative EVA test is required prior to vaccination of intact colts between 6 and 12 months of age.  
[21.30.7.19 NMAC - N, 7-15-05]

**21.30.7.20 NURSE MARES:** A nurse mare shall be:

- A.** sero-negative
  - B.** officially vaccinated against EVA in accordance with section 21.30.7.18 NMAC.
- [21.30.7.20 NMAC - N, 7-15-05]

**21.30.7.21 TEASER STALLIONS:** A teaser shall be officially vaccinated against EVA in accordance with section 20.30.7.18 NMAC.  
[21.30.7.21 NMAC - N, 7-15-05]

**HISTORY OF 21.30.7 NMAC:** [RESERVED]