Purchase Examinations and Importation Requirements for European Performance Horses and Their Semen Entering the United States

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Abstract: A comprehensive purchase examination is expected by American clients intent on importing a horse from a foreign country. American veterinarians may be involved in performing purchase examinations in foreign countries or, more often, interpreting findings from foreign veterinarians for their American clients. Exportation and importation requirements for horses and semen vary from country to country. Detailed knowledge of the requirements by all involved veterinarians is essential for efficient and successful international equine travel.

Many large equine practices in Europe liaise with foreign veterinarians to perform purchase examinations for horses sold on the international market. After a horse passes a purchase examination, further examinations and tests are required before the international journey begins.

The frequency of international transfer of horses has increased tremendously over the past decade. Equine air travel is routine, and quarantine and importation restrictions must be carefully followed. Importation requirements for European horses that are flown for a weekend to attend competitions in North and South America differ from requirements for horses traveling within the United States. To prevent the spread of economically important diseases such as equine infectious anemia, piroplasmosis, dourine, glanders, and African horse sickness, strict US importation requirements exist. Additional special requirements exist for mares, stallions, and semen to prevent sexually transmitted diseases such as contagious equine metritis (CEM). Failure to comply with the requirements for controlling foreign animal diseases may result in state or federal penalties as well as loss of client goodwill. Knowledge of importation requirements and procedures can streamline the process for your clients and create income for your practice.

Coordinating a Foreign Purchase Examination

For the American Association of Equine Practitioners (AAEP) Guidelines for Reporting Purchase Examinations1 go to www.aaep.org/purchase_exams.htm.

As with all purchase examinations, the “client” is the prospective purchaser.

Before the purchase examination, the following points should be considered:

- If the purchase examination will be performed by a US veterinarian traveling to Europe, a European clinic must be contacted for permission to use its facilities. In addition, the US veterinarian must determine whether the clinic has all the required equipment. This is obviously a very expensive option for clients because they are responsible for the veterinarian’s airfare, accommodations, and time, in addition to the expenses incurred at the European clinic.
- If the purchase examination will be performed by a European veterinarian, the US veterinarian can assist the client by collaborating with the European veterinarian and deciding what the examination will entail. It is essential that the procedures...
Horses are loaded into a cargo box at an airport. Grooms and a veterinarian are present.

Figure 1. Horses are loaded into a cargo box at an airport. Grooms and a veterinarian are present.

and the expenses to be incurred are clearly detailed and agreed on, in writing, by all parties before the examination. The following questions should be considered by the prospective purchaser:

— What will be the cost of each examination procedure? The price of the horse is an important consideration because the fee for the clinical examination and the number of radiographs obtained often depend on the horse’s value.
— Should the horse be exercised only on a lunge line or also under saddle?
— Will endoscopy of the upper airway be performed, or only if an upper airway noise is heard during exercise?
— Will the horse’s blood or urine be analyzed for drug residues? As an alternative to on-site drug testing, serum and urine samples can be collected and stored for up to 6 months.
— Will the European veterinarian’s interpretation of the clinical examination findings and diagnostic images be sufficient, or will the US veterinarian be responsible for interpreting the results?

Questions the US Veterinarian Should Ask the Client Regarding the Clinical Examination

• Do you want a standard examination or additional tests, such as dilation of the pupils for a retinal examination or testing of breeding soundness for mares and stallions? When advising a client, it is important to determine the definition of a “standard examination” because it can vary from veterinarian to veterinarian and from country to country.
• Which joints should be radiographed, and which radiographic views should be provided? The answers to these questions vary depending on the horse’s age, purchase price, performance level, and intended use. The standard for German equine sales is 12 radiographs (i.e., 45° dorsopalmar view of the navicular and coffin bones, including the fetlock joints and sesamoid bones; a lateral-medial view of each front and hind foot, including P1 through P3; the distal and proximal sesamoid bones; two oblique views of each tarsus; and lateral-medial views of the stifles). For high-level horses, the following additional radiographs are recommended: the caudal aspect of the head (i.e., the occiput and the site of insertion of the nuchal ligament), the cervical and thoracic vertebrae (i.e., the vertebral bodies, facet joints, and spinous processes), and additional views of the feet, including the navicular bones, tarsi, stifles, and any other area of interest.
— If endoscopy is performed, do you want it performed with or without sedation to evaluate the larynx?
— Should any further laboratory tests be performed? Testing stallions for equine arteritis virus (EAV) is recommended because they can be persistently infected. Stallions with a positive test result have restrictions regarding breeding and travel to certain countries.

Communication

Ideally, the purchaser and US veterinarian should be available by telephone during the purchase examination. Availability can be difficult because of the 6- to 9-hour time difference between the United States and Europe. If the purchaser and/or US veterinarian cannot be available, the European veterinarian should be provided with clear instructions on the level of diagnostic investigation to pursue if a problem is identified. For example, if a low-intensity heart murmur or tendon thickening is detected, should the European veterinarian contact the US veterinarian for further instructions, should echocardiography or ultrasonography (of the tendon) be performed at the European veterinarian’s discretion, or should the examination be terminated?

Reviewing Images

The increasing availability of digital radiology, ultrasonography, and endoscopy allows rapid dissemination of images. Should images be sent by e-mail or regular mail? E-mail can save time and expense, and a DICOM (digital imaging and communications in medicine) viewer for examining the images is generally included in the e-mail attachment.

Expenses and Payment

The European veterinarian must be given clear directions regarding which procedures should be performed, and the client should be informed of the anticipated expenses. Payment and contact information should be provided by e-mail or fax. An estimate of the horse’s value is necessary for the veterinarian’s insurance. For new clients, most European veterinarians require the client’s credit card information before the examination. If the purchase examination is billed by the European veterinarian, the US client must pay the tax included in the veterinarian’s bill. In Germany, the value-added tax (VAT, 19%) can be refunded if the client submits it to a German state office.

Coordinating Shipping (Exportation and Importation)

International equine air travel is well organized and efficient. A regular cargo box is generally used to ship up to three horses (FIGURE 1). Larger boxes or private boxes can be requested. Shipping...
companies provide the purchaser’s veterinarian clear directions for meeting exportation/importation requirements based on information from the country of destination. A pre-exportation quarantine is not necessary for horses shipped from countries in the European Union (EU) to the United States and Mexico. Testing requirements are subject to change and may vary from the standard if there is a disease outbreak or as new diagnostic tests become available. For all regulated diseases, it is essential for the requested test to be performed by an accredited laboratory at the appropriate time interval before the shipping date. The required diagnostic tests vary according to the age and sex of the horse.

For mares and stallions older than 2 years, flights should be arranged at least 10 to 14 days in advance. If flights are available, young horses and geldings can be shipped on shorter notification. For the journey, horses require a passport; an EU health certificate, which is valid for 10 days; and a health certificate for shipment to the United States. The EU health certificate must be ordered at least 48 hours before the flight because a state veterinarian from the nation of export must examine the horse to assess its health and verify its identity and documentation. Within Europe, all documentation is computerized. Because the state veterinarians usually do not work on weekends, special arrangements must be made if a horse is scheduled to leave early on a Monday morning.

The content of health certificates for shipment to the United States depends on the age and sex of the horse. These documents certify the following:

- The horse has been within the EU for the past 60 days, and the barn in which the horse has been housed is free of evidence of communicable diseases.
- The horse is free of ectoparasites and has not been on premises where the following diseases have been detected during the 60 days preceding exportation to the United States: African horse sickness, dourine, glanders, surra, epizootic lymphangitis, ulcerative lymphangitis, equine piroplasmosis, Venezuelan equine encephalomyelitis, equine infectious anemia (EIA), vesicular stomatitis, and CEM (BOX 1).

For a mare, culture specimens from the clitoral fossa and its medial and lateral sinuses were tested within 30 days of exportation. Culture specimens must be received by an approved laboratory within 48 hours after collection, and the results must be negative for CEM. For a stallion, samples taken from the prepuce, urethral sinus, and fossa glandis must be negative for CEM. The horse must not have been used for breeding after sampling and must not have had contact with horses with CEM.

No live, attenuated, or inactivated vaccine should be administered during the 14 days preceding exportation to the United States. Vaccination before that period is not required but is highly recommended. Some countries require that the horse be identifiable by microchip.

**Importation Testing Requirements**

The following tests are currently required for entry into the United States:

- **Colts and fillies younger than 2 years as well as geldings:** The US Department of Agriculture (USDA) does not require any testing to be performed in Europe because all horses are tested for piroplasmosis, dourine, EIA, and glanders on arrival in the United States. However, testing in Europe is strongly recommended because of the minimal costs of these tests compared with the cost of shipping and the consequences of positive test results.

- **Stallions older than 731 days (2 years):** Within 30 days before exportation, culture samples from the prepuce, urethral sinus, and fossa glandis (including its diverticulum) must be analyzed for CEM. This testing requires 7 days plus a maximum of 2 days for shipping. Blood tests for piroplasmosis, dourine, EIA, and glanders are recommended in Europe because they will be performed on arrival in the United States. If a stallion has a positive CEM culture result in Europe, it must be treated according to the USDA protocol and is not eligible for retesting until 21 days after treatment. Until the stallion arrives at its destination, natural breeding is not allowed after test samples have been collected.

- **Mares older than 731 days (2 years):** Within 30 days of before exportation, cultures from the medial and lateral sinuses of the clitoral fossa must be analyzed for CEM. This takes 7 days plus a maximum of 2 days for shipping. Blood tests for piroplasmosis, dourine, EIA, and glanders are recommended in Europe because they will be performed on arrival in the United States. If a mare has a positive CEM culture result in Europe, it must be treated according to the USDA protocol and produce a negative culture. The horse is eligible for retesting at least 21 days after treatment. Natural breeding and artificial insemination are not allowed between sample submission and shipping.

- **Chilled or frozen semen:** Semen must originate from a semen collection facility that is approved or licensed by the nation of export, and an EU health certificate for shipment to the United States must be ordered at least 10 to 14 days in advance. This must be performed by an approved laboratory within 48 hours after collection, and the results must be negative for CEM. The horse must not have been used for breeding after sampling and must not have had contact with horses with CEM. Additionally, semen must originate from a semen collection facility that is approved or licensed by the nation of export, and an EU health certificate for shipment to the United States must be ordered at least 10 to 14 days in advance. This must be performed by an approved laboratory within 48 hours after collection, and the results must be negative for CEM. The horse must not have been used for breeding after sampling and must not have had contact with horses with CEM.
health certificate is necessary for importation.\(^7\) Stallions must test negative for dourine within 30 days after entering a semen collection facility. Stallions must not be used for natural breeding for 15 days before the initial tests. Before semen collection, the stallion’s prepuce and penis, including the fossa glandis and urethral sinus, must be scrubbed with no less than 0.2% chlorhexidine and packed with an antibiotic ointment that is effective against *Taylorella equigenitalis* (the causative agent of CEM) for 5 consecutive days. In addition, the stallion must produce negative CEM culture results on three different occasions (beginning at least 7 days after the last scrubbing and packing and at no less than 72-hour intervals thereafter), per the USDA protocol. If milk or eggs are used in the semen extender, there are restrictions to prevent the importation of foot-and-mouth disease and Newcastle disease.

**The Flight**

Horses must arrive at the airport 4 hours before departure to determine if they will remain quiet and relaxed in the shipping container, which is moved several times before boarding to ensure that the horses tolerate it (FIGURE 2). “Flying grooms” take care of the horses during the flight and whenever the containers are moved (FIGURE 3). These grooms are often members of the Animal Transportation Association, an international nonprofit organization dedicated to the safe and humane transport of animals. The grooms can also be booked for transport to the airport and from the airport to the final destination. Equipment such as a halter, a blanket, and bandages are included in the horses’ airfare. For additional equipment, an extra fee is charged according to the equipment’s volume and weight.\(^8\)

The only accredited US airports for the importation of horses are John F. Kennedy International Airport in New York City, Miami International Airport in Florida, and Los Angeles International Airport in California. After arrival in the United States, agents of The Dutta Corporation (in Miami and New York City) or Jet Pets Equine or Apollo (in Los Angeles) take care of the horses and documentation, including clearing goods for importation and shipping blood samples to a laboratory after they are collected on arrival.

On arrival in the United States, every horse is quarantined for 3 days in a USDA-approved barn. After this quarantine, horses younger than 2 years as well as geldings can be shipped to their final destination. Mares and stallions older than 2 years require further testing: mares remain quarantined for no fewer than 21 days, while stallions remain quarantined until the USDA treatment protocol is completed and they test negative for CEM.

**Conclusion**

Purchase examinations require careful instructions regarding which procedures should be performed. Importation requirements change constantly, so it is essential that veterinarians have current information on the regulations, which is provided by accredited laboratories. Occasionally, horses that test negative for a disease in Europe test positive on arrival in the United States. No test is 100% sensitive or specific; therefore, the inherent inaccuracy in diagnostic testing is unavoidable. European and US horse owners must recognize this potential problem. Horses that test positive for a disease on arrival in the United States are returned to Europe at the European owner’s expense.

Familiarity with the testing requirements for exotic diseases and appreciation of the potential misunderstandings during foreign purchase examinations can help veterinarians advise their clients. Working with a European veterinarian who is well acquainted with exportation procedures and employing a reputable shipping company can help ensure that everyone involved is satisfied and that your future patient arrives safely at its destination.

**Acknowledgment**

The authors thank Guido Klatte for sharing his experience in shipping horses and Dr. John Schumacher for reviewing the manuscript.

**References**

7. Swabs from specific parts of the reproductive tracts of mares and stallions are required to test for
   a. piroplasmosis.
   b. dourine.
   c. glanders.
   d. CEM.

2. EAV testing is recommended for
   a. mares.
   b. stallions.
   c. geldings.
   d. foals.

3. How many radiographs are required for standard German purchase examinations?
   a. 8
   b. 12
   c. 16
   d. 20

4. Up to how many horses can be shipped in one regular cargo box?
   a. one
   b. two
   c. three
   d. four

5. Is a pre-exportation quarantine necessary for horses being shipped from the EU to the United States?
   a. no
   b. yes, depending on the horse's age
   c. yes, depending on the horse's sex
   d. yes, so that post-exportation quarantine can be avoided

6. Testing for CEM is required for
   a. mares and stallions older than 2 years.
   b. colts younger than 6 months.
   c. mares and fillies of any age.
   d. all horses regardless of age.

7. If a stallion intended for export from Europe to the United States tests positive for CEM,
   a. the horse and his semen are ineligible for import into the United States because the horse is infected for life.
   b. the horse cannot be imported because it is infected for life, but the horse's semen can be imported after treatment with antibiotics.
   c. the horse can be treated with systemic penicillin and gentamicin for 5 days and imported after 21 days.
   d. the horse must be treated with antibiotics according to the USDA protocol; if the horse tests negative 21 days after treatment, it can be imported.

8. Which of the following regarding the 2008 US CEM outbreak is true?
   a. Only Arabian stallions were affected.
   b. Only Arabian mares were infected.
   c. Stallions of 11 different breeds were affected.
   d. Exposed horses were confined to California, Georgia, Illinois, Indiana, Iowa, Kentucky, Texas, and Wisconsin.

9. Which airport is not accredited for the importation of horses?
   a. John F. Kennedy International Airport in New York City
   b. Blue Grass Airport in Lexington, Kentucky
   c. Miami International Airport in Florida
   d. Los Angeles International Airport

10. Infection with *T. equigenitalis* causes
    a. CEM.
    b. piroplasmosis.
    c. dourine.
    d. glanders.