



Instructions for Submitting Samples for EVA Testing

Ms. Kathy Shuck should be contacted prior to submission, 859-218-1170.

Blood/Serum Samples:

1. A venous blood sample should be collected from the horse to be tested for evidence of equine arteritis virus infection using a red-top vacutainer tube or a separator tube. The sample should be allowed to clot and the serum (2-5 ml) taken off and transferred to a separate tube on which the animal's name and date of collection are written clearly on the label.
2. The serum/blood sample should be carefully packed to avoid breakage of the tube in transit and the sample, together with a completed submission form, mailed to:

UNIVERSITY OF KENTUCKY
Department of Veterinary Science
Gluck Equine Research Center, Rm. 444
Lexington, KY 40546-0099

3. The serological test for equine viral arteritis is usually put up on Tuesday of every week and the final result read the following Friday (72 hours later). Only those samples received by late Monday afternoon will be included in that week's test.
4. Uncommonly, blood samples are received which turn out to be toxic when tested. In these instances, a repeat sample may be requested for re-testing to overcome the toxicity problem if this interferes with determination of antibody status (titer) of the sample.

Semen Samples:

Virus isolation from semen should be attempted on stallions that test positive (titer $\geq 1:4$) for neutralizing antibodies to equine arteritis virus and which do not have a certified history of vaccination against EVA. A serum specimen must accompany the semen sample if the stallion being screened has not previously been serologically tested at this laboratory.

1. Isolation of virus should be carried out preferably from a portion (minimum 10 ml) of an entire ejaculate collected using an artificial vagina or a condom and a teaser or phantom mare. When it is not possible to obtain semen by this means, a less preferable alternative is to collect a dismount sample at time of breeding. When only cryo-preserved specimens are available, two 0.5 ml straws or one of the 5 ml straws can be submitted. However, the laboratory must be contacted before submitting these specimens.
2. Care should be taken to ensure that no antiseptics/disinfectants are used in cleansing the external genitalia of the stallion prior to collection.

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3. Samples should be gel-free and contain the sperm-rich fraction of the ejaculate. No extender should be used.
4. Immediately following collection, the semen should be refrigerated on crushed ice or on freezer packs for transport to the laboratory with a minimum of delay. When there is likely to be a delay in submitting a specimen for testing, the semen can be frozen at or below -20°C for a varying period of days or weeks before being dispatched to the laboratory. Freezing does not interfere with the successful isolation of equine arteritis virus from the semen of a carrier stallion.
5. All semen and serum samples, whether refrigerated or frozen, should be packed in a styrofoam container on **several** frozen freezer packs or “dry ice” accompanied by a completed submission form and sent by **overnight** delivery service, e.g. Federal Express, to:

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Lexington, KY 40546-0099

Unspun blood cannot be sent if using “dry ice”, but can be wrapped in newspaper or several paper towels and placed at the top of the box containing frozen freezer packs.

6. Preferably, samples should be dispatched to the laboratory Monday through Wednesday to avoid the risk of a shipment being delayed over a weekend and being spoiled in transit. The Gluck Center is not open to receive samples on Saturdays or Sundays or national holidays.
 7. Where possible, samples of semen will be put up in test with a minimum of delay. Samples are routinely put up on Thursday of each week and barring unforeseen problems, the results are reported out eight days later on Friday. Only those samples received by late Wednesday afternoon will be included in that week’s test.
 8. In instances where a sample of semen arrives unrefrigerated and at ambient temperature, a repeat sample will be requested that day by telephone. Virus isolation will only be attempted on semen samples arriving at the laboratory in satisfactory condition.
 9. Test results will be provided on every serum and semen sample tested and will only be sent to the submitting veterinarian or to his/her nominated representative.
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