



Collection and Shipment of Testes for Harvesting and Cryopreservation of Epididymal Sperm (v. 12/15/21)

Collection and cryopreservation of epididymal semen allows an opportunity for a horse owner to retain genetic material (i.e. spermatozoa) in the untimely and unexpected event of a death or euthanasia of a valuable stallion. In addition, epididymal semen can also be collected and cryopreserved following elective castration. However, in general spermatozoa collected from ejaculated semen will yield better pregnancy rates than epididymal semen.

Procedures:

1. **Information**. Please contact the Equine Reproduction Laboratory at Colorado State University and provide required information. An owner information form is available and should be filled out and sent with the shipment. Please fax a copy to the ERL/CSU in advance if possible.
2. **Testicle Removal**. Castrate the stallion using normal procedures. Leave the testicle and epididymis intact. (i.e. DO NOT remove the epididymis). Try to leave as much of the vas deferens as possible attached to the epididymis (see photo on next page). Ligate the Deferent Duct with suture to prevent sperm from leaking out.
3. **Packaging**. Place testicles on top of a folded towel or other material that is a buffer from the coolant cans, so the testicles do not freeze. Two (2) frozen coolant cans or ice packs should be in the shipping container, but ***not touching the testicles***. The testicles should not be frozen; the goal is to keep the testes cool until they arrive at Colorado State University.
4. **Shipping Container**. An Equitainer[®], Styrofoam box or similar insulated shipping container can be used. Place the 2 frozen coolant cans at the bottom of the Equitainer[®], cover with a towel or a thick layer of paper towels or other material, then place the testicles at the very top.
5. **Shipment**. The container can be shipped by overnight courier or by counter-to-counter airline service. In order to optimize recovery and cryopreservation of epididymal spermatozoa, the shipment needs to arrive **within 24 hours of castration**.

Shipping address:

Equine Reproduction Laboratory
Colorado State University
3101 Rampart Rd.
Fort Collins, CO 80521
Ph. 970-491-8626 Fax 970-491-7005



Fee Schedule *(all fees are non-refundable)*

Processing Testes and Sperm recovery	\$ 780.00
Epididymal Semen Freeze (includes 3 packets extender)	\$ 575.00
Additional Freezing Extender (per add'l packet used)	\$ 65.00
Frozen Semen Storage	\$ 25.00 / month up to 400 straws
Shipping	\$ Varies
Vapor Shipper Rental	\$ 100.00
Frozen Semen Handling Fee	\$ 50.00

Castration Guide

Photograph of testis, epididymis and vas deferens. The goal is to castrate the stallion high enough to conserve as much of the vas deferens as possible, as some sperm are stored in this structure. Sperm will be harvested from the vas deferens and tail of the epididymis.

1. **Vas deferens** - location of ligation to prevent leakage of sperm shown in the blue rectangle.
2. **Tail of the epididymis** - spermatozoa are stored in this structure.
3. **Testes** – site of sperm production.

