

REGARDING ARTIFICIAL INSEMINATION WITH SHIPPED SEMEN

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Artificial insemination with fresh shipped semen has become a popular breeding choice for many mare owners in the last few years. Artificial insemination, by nature, is a more controlled way to breed horses than other methods (see *So You Want To Breed Your Mare* for more details). A few of the benefits of selecting shipped semen over other breeding methods for your mare are:

- 1) The broadened scope of stallions to which you can breed your mare. Semen can be shipped overnight from California to breed a mare that lives in Maine, or vice versa.
- 2) Your mare can stay home, sparing the expense of shipping and the risk of injuries occurring to her while away at a stud farm.
- 3) It is often the method of choice for mares with special health needs that would otherwise not be able to accommodate the stallion, i.e. poor attitude, rear limb lameness, previous breeding trauma to the genital tract.

One of the key points to a successful breeding with fresh shipped semen is good communication between all parties involved - the stallion owner, the mare owner, and the involved veterinarians at both ends of the procedure.

First, to help ensure the procedure to succeed, the mare owner should do some homework, often several months in advance of the anticipated breeding date. Once a stallion is selected, the mare owner should request information regarding the stallion's fertility rate with fresh shipped semen in numbers. Good motility means the sperm progress straight across the microscope field. Good sperm density is in the high 100's to 200 million per milliliter. In general, the quality of semen from stallions that stay home is usually better than from those that are showing during the breeding season. The stress of competing, traveling, body temperature changes or illness can all affect the viability and quantity of the sperm. Next, it is essential to learn as much as you can about your mares estrus, or 'heat' cycle. Lastly, there needs to be a clear understanding by the mare owner of what the stallion's collection schedule is (certain days of the week, away for shows, etc.) in order to synchronize this with the mare's estrus cycle.

The act of synchronizing schedules is subject to several factors. It is recommended to learn the mare's heat cycle at least one cycle before the intended breeding date. Most stallion owners will request a certificate of a clean uterine culture before shipping semen. This is important, because the active organism of even a subtle infection will kill sperm. The uterine culture needs to be harvested the cycle before the cycle which you intend to breed upon. If a culture is positive, treatment needs to begin immediately.

Some mares have rather predictable estrus behavior while others do not. Other mares may not exhibit signs of heat without a 'suitable' male on the farm to converse with. Several manual or ultrasonic examinations of the mare's ovaries (sometimes called ovary checks or rectal exams) while she is in heat may need to be performed by the veterinarian in order to ensure the proper timing of the breeding. Mares differ as to when they ovulate in their cycle and the mare needs to be inseminated as close to ovulation as possible.

Most stallion managers want to be notified when the mare first comes into heat to initiate arrangements. Then, when the manager receives the request for shipment, the collection is scheduled, often on the same day. Many stallion owners request the full stud fee to be paid before the semen is shipped. Mare owners can also be subject to fees in addition to the booking and stud fees. Additional costs vary, but most will charge a lab fee and a deposit on the Equitainer for each shipment from which the shipping charges are deducted. Most farms use the Equitainer^R to ship semen (although there are other types of containers too), and the shipping charge one way averages \$14 to \$50 by Federal Express. The Equitainer is supposed to keep the semen at 5°C (42°F) for 70 hours. Recently, disposable Styrofoam containers have become popular, but their ability to withstand heat stress is often questioned. If it has to sit in the cargo hold of a Federal Express plane on the runway in the heat, the semen may warm. Some stallions may need to be shipped by airline to arrive the same day (may not preserve well).

Once the semen has arrived, your veterinarian, who will verify one last time that she is near ovulation, can place it inside the mare. If the mare is not ready to be inseminated, leave the Equitainer closed to maintain the shipments integrity. Once bred, be sure to follow through with the paperwork.