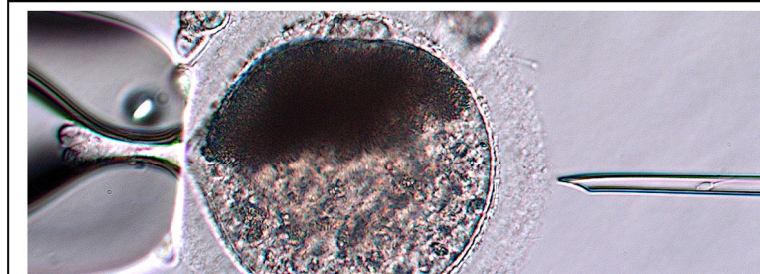


Oocyte Recovery and ICSI

Equine Medical Services is one of the world's leading producers of vitro produced embryos. ICSI (Intracytoplasmic Sperm Injection), where an individual sperm cell is microscopically injected into each egg, is useful for mares that cannot make embryos on their own or for situations where supplies of semen are limited. The ability to recover multiple oocytes (eggs)

provides the possibility for multiple embryos to be produced. For this procedure oocytes are collected from the donor mare's follicles and cultured to finish maturation. The oocytes are fertilized in the laboratory by injecting a single sperm cell into each egg. The fertilized oocyte is then cultured and allowed to divide to become an embryo; each cellular division cycle takes about 24 hours. Once the embryo becomes a blastocyst (7-10 days), it is transferred to the uterus of a recipient mare or frozen (vitrified) for storage. Since only a single sperm cell is selected and injected, ICSI can utilize very small quantities of frozen semen.



ICSI: Sperm cell (in pipette on right) being injected into an oocyte.

in



ICSI Blastocysts 7 days after fertilization

What to Expect

The results partially depend on the number of oocytes recovered and this is influenced by the number of follicles a mare has that are available for aspiration. The average oocyte recovery rate is about 75% per follicle aspirated. Approximately 65% of the recovered oocytes will mature to be fertilized. Fertilized oocytes will divide and grow around 70% of the time; an average of 25% of fertilized oocytes will grow in culture to the blastocyst stage for non-surgical transfer, but these numbers are highly variable between mares and even stallions. Oocyte quality and vigor decline with the donor mare's age so that older donors, especially those into their 20's tend to have lower success rates than

young mares. Pregnancy rates for ICSI embryos tend to run about 10% lower than for flushed embryos, but this is usually counterbalanced by the increased number of embryos available. The pregnancy loss rate is also about 10% higher for ICSI embryos than flushed embryos.

EMS ICSI Embryo Production 2025

	In-House		Transported oocytes		Total	
	Number	%	Number	%	Number	%
Aspirations	765		905		1,670	
Oocytes	8,021		10,750		18,771	
Maturation*	4,794	59.8 %	5,762	53.6 %	10,556	56.2%
Cleaved**	3,483	72.7%	4,124	71.5%	7,607	72.1%
Blastocysts (embryos)***	1,365	28.4%	1,447	25.1%	2,812	26.6%

*The number of oocytes presented that matured to allow fertilization (sperm injection).

** The number of matured oocytes that, once fertilized, started dividing into multiple cells.

*** The number (or percentage) of fertilized oocytes that became blastocysts (transferrable embryos).

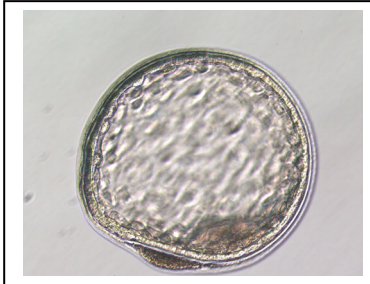
2026

Embryo Transfer and ICSI Programs

The advanced reproduction programs at Equine Medical Services have several options: 1. You can bring your mare to our facility for us to breed the mare and recover embryos for transfer or freezing; 2. You can bring your mare for oocyte recovery and ICSI with embryos transferred, shipped, or frozen; 3. You can have oocytes recovered at another facility, shipped to EMS for ICSI and embryos can be shipped back to another facility for transfer, or frozen, or; 4. For a limited number of mares oocytes can be shipped from another facility to EMS for ICSI and one embryo transferred into an EMS recipient mare. Fees vary somewhat between programs, but some common terms should be noted. The recipient mares provided by Equine Medical Services are leased to the owner once they are 30 days in foal. Alternatively, you can provide your own recipient mare, with some restrictions. EMS recipient mares are to be returned to Equine Medical Services within 6 months after foaling. There is a live foal guarantee for EMS recipients after the recipient mare is 30 days pregnant, the owner will receive a \$2,000 credit towards future embryo transfer services if the recipient loses the pregnancy. There is an annual enrollment fee for each in-house program, but not for the transported oocyte program. This enrollment fee is for each donor mare, is non-transferable, non-refundable, and good for the calendar year 2026 only. If foals from a donor mare will belong to different owners, it is less expensive if they are handled through one account, although if billing to different owners is desired, each owner will be required to fill out a contract and pay a nomination fee.

Standard In-House Embryo Transfer Program

The standard program has an annual enrollment fee of \$1,350 for the year 2026. This fee is designed to pay for routine management and ultrasound examination. Stallion fees, transportation of semen, registration, blood typing, etc. are the responsibility of the owner. Board fees for the donor mares vary with accommodations. Paddock board (with 3-4 other horses) is \$28.00 per day, stall board is \$28.00 per day, and mare and foal board is \$29.50 per day. The fee for each embryo collection flush is \$500, and \$300 to transfer each embryo. Once the recipient mare reaches 30 days gestation with a viable pregnancy, the owner leases her for \$4,850. Board and care of the recipient mare after 30 days are the responsibility of the owner, who is encouraged to pick her up at this time. Board for the recipient mare starting at 30 days is \$22.00 per day, from 60-90 days \$24.00 per day, and after 90 days of gestation recipient board will be \$26.00 per day.



ICSI Program

The ICSI

Program (Contract A) is set up in a similar manner to the Embryo Transfer Program. There is an initial entry fee into the program of \$1,350. This is to pay for normal breeding management of the donor mare, and is a one-time fee for the year, regardless of the number of pregnancies achieved. Each oocyte collection session is \$625. The fee for oocyte maturation is \$200 and ICSI is \$500. There is a \$950 fee for each blastocyst produced, and \$300 to transfer each embryo. Once a recipient mare reaches 30 days of gestation with a viable pregnancy there is a lease fee of \$5,800, but credit from the blastocyst fee will reduce the net lease to \$4,850.

The Oocyte Recovery and ICSI contract (Contract B) is for mares that are either housed at EMS or for “drive-through” aspiration mares for embryo production without the use of EMS recipient mares. There is no initial entry fee for this contract.

The Oocyte Recovery, ICSI, and ET contract (Contract C) is for “drive-through” aspiration donor mares where the owner would like to use EMS recipient mares. There is a \$1,000 entry fee for this contract.



Transported Oocyte ICSI Program

The Transported Oocyte for ICSI contract (Contract D) allows for ICSI for oocytes recovered at another facility and shipped to EMS with EMS shipping embryos back to the referring veterinarian or another center for transfer or freezing for future transfer. This program has no initial entry fee, oocyte maturation is \$200, ICSI is \$500, and there is a \$950 fee for each blastocyst produced.

The Transported Oocyte for ICSI/ET contract (Contract E) allows for ICSI for oocytes recovered at another facility and shipped to EMS with EMS transferring one embryo into an EMS recipient mare. Additional embryos can be shipped to another facility or frozen for future use. If a pregnancy does not result from the first embryo transferred the owner can elect to ship oocytes again or transfer an embryo frozen from the first shipment. This program has a \$1,000 entry fee. The fee for oocyte maturation is \$200, ICSI is \$500, there is a \$950 fee for each blastocyst produced, \$300 to transfer each embryo and a recipient lease fee of \$4,850.

DONOR MARE ADMISSION SHEET

If vaccinations or hoof care is not documented, EMS will perform as necessary (without notification) to ensure the comfort and safety of all horses in our care.

Mare Information

Registered Name: _____

Barn Name: _____

Breed: _____

Age: _____

Color: _____

Owner Information

Owner Name: _____

Owner Address: _____

Phone: _____

E-mail: _____

Main Contact (if different than owner):

Agent name: _____ Phone: _____ E-mail: _____

Care Instructions

Grain: _____ Hay: Grass ☐ Alfalfa ☐ Grass/Alfalfa mix ☐

Hoof Care: Shoes: Front: ☐ Back: ☐

Do you want her to be trimmed/reset by our farrier: Yes ☐ No ☐ Date of last visit: _____

Any additional Services Requested (Dental): _____

Vaccine History

Coggins: ____/____/____ (Attach copy)

Flu/Rhino: ____/____/____

EWT: ____/____/____

Strangles: ____/____/____

West Nile ____/____/____

Rabies: ____/____/____

Last Deworming Date: ____/____/____

Services Requested

Breed To Carry: ☐ Embryo Transfer: ☐ Oocytes/ICSI: ☐

1. Stallion: _____ Fresh: ☐ Frozen: ☐

Stallion Station/Contact: _____ Phone: _____

2. Stallion: _____ Fresh: ☐ Frozen: ☐

Stallion Station/Contact: _____ Phone: _____

Breeding Information

Maiden: ☐ Foal by side: ☐ (Foaling date: _____)

Culture, foaling and/or breeding history: _____



Contract A
2026 In-house ICSI Program

This Contract made on _____, 20____, by and between **Equine Medical Services, Inc.**, a Missouri Corporation, hereinafter called “**EMS**”, and _____, hereinafter called “**Owner**”, both of whom are hereinafter called the “**Parties**”.

Recitals:

EMS is in the business of equine oocyte recovery and embryo production via ICSI.
Owner desires to enter a contract with EMS for such services.

Therefore, the Parties agree as follows:

1. Owner shall deliver its mare, the “Donor Mare”, named _____, to EMS in Columbia, Missouri. Upon delivery, EMS shall initiate the process of oocyte collection. EMS shall attempt to recover oocytes from the Donor Mare, evaluate the oocytes, and if apparently healthy, fertilize the oocytes via ICSI, and freeze resulting embryos or transfer embryos produced into the uterus of “Recipient Mares” prepared and owned by EMS.

2. Upon the signing of this Contract, Owner shall pay to EMS a \$1,350.00 non-refundable (under any circumstances) annual enrollment fee. Said fee shall be considered payment for **only** the following services: palpation, ultrasound examination, and general reproductive management, between February 1, and December 1, 2026. Owner will be charged standard veterinary fees for uterine treatment and GNRH agonist injections if they are deemed necessary based on the separate judgment of EMS. In addition owner agrees to pay veterinary fees deemed necessary for proper breeding and health management. This nomination fee is not transferable to another “Donor Mare” nor is the nomination fee for this “Donor Mare” transferable to another owner.

3. Owner agrees to pay EMS \$625 for each oocyte collection procedure, \$200 for oocyte culture and maturation per cycle, \$500 for each ICSI (Intracytoplasmic Sperm Injection) session, and \$300 for the transfer of each embryo transferred into a Recipient Mare. Owner agrees to pay EMS \$950 for each blastocyst produced, whether transferred into a Recipient Mare or frozen.

4. Upon each Recipient Mare reaching 30 days of gestation with a viable pregnancy, Owner shall be charged \$5,800.00 for lease of the pregnant recipient mare. Credit for the previously mentioned blastocyst fee will be credited yielding a net lease fee of \$4,850.00 which Owner will pay to EMS. EMS shall start charging boarding fees for the Recipient Mare after she reaches 30 days gestation at the rate of \$22.00 per day. The Owner may, and is encouraged to, transport the Recipient Mare any time after she reaches 30 days of gestation. Without prior arrangements, board for pregnant recipients will increase to \$24.00 per day at 60 days of gestation and \$26.00 per day at 90 days of gestation.

5. Owner shall return each Recipient Mare to EMS in good health within 6 months following foaling. If Owner is unable to so-return the Recipient Mare due to the death of the mare, Owner agrees to pay EMS \$2,000.00 (\$3,250.00 if the Recipient Mare is a draft or draft cross mare), and to supply EMS with a letter from the examining veterinarian stating findings at the time of the death of the Recipient Mare. If Owner fails to return the Recipient Mare for any other reason Owner agrees to pay EMS \$5,000.00 (\$6,000.00 if the Recipient Mare is a draft or draft cross mare).

6. It is expected that each Recipient Mare will deliver a live foal (defined for this purpose as able to stand and nurse within 24 hours after birth). If, after 30 days gestation, a Recipient Mare loses the pregnancy, the Owner will receive a \$2,000 credit towards future services. The Recipient Mare must be returned and a letter from the examining veterinarian stating findings at the time of loss must be presented for the credit to be issued. No credit will be issued if the loss is due to an inherited genetic defect such as, but not limited to, lethal white syndrome.

7. If EMS is in possession of Donor Mare, Owner shall pay as billed by EMS as follows:
 - a. for pasture boarding, \$28.00 per day;
 - b. for stall boarding, \$28.00 per day;
 - c. for mare and foal boarding, \$29.50 per day.

All boarding arrangements are on a first-come, first-serve basis. Paddock boarding is only available from March 15 through September 15. If Owner has not transported Donor Mare from EMS within 30 days of cessation of reproductive procedures, the above board rates will be doubled from that time forward.

8. EMS recommends to Owner that Owner insure Donor Mare, Recipient Mare and the embryo against all losses and risks of every kind, nature and description. Owner shall indemnify and hold EMS harmless with respect to said losses and risks. The parties agree and understand that during the period that EMS is in possession of the Donor Mare, good practice and health considerations may require medical or farrier treatment for unforeseen or emergency conditions. Therefore, during the term of this agreement, owner hereby grants to EMS the right and authority, based upon its separate judgment, to have the Donor Mare treated or shod at any time. Owner shall pay/reimburse EMS for the cost thereof. Owner also agrees to be financially responsible for veterinary expenses of the Recipient Mare after 30 days of gestation.

9. All notices required by this Contract shall be given as follows: if to EMS, then, Equine Medical Services, Inc., 5851 Deer Park Road, Columbia, MO 65201-9751; if to Owner, then the address shown at Owner's signature.

10. Owner understands and agrees that EMS is not responsible for the expense of stallion fees, transporting semen, or semen containers. Further, Owner understands and agrees that EMS is not responsible for registration or blood-typing of the resultant foal.

11. Owner understands and agrees that many factors impact upon successful oocyte recovery, embryo production via ICSI, and pregnancy following embryo transfer, and that although EMS shall use its best efforts to perform the services required by this Contract, EMS does not guarantee success of the procedures. If EMS is unable to either recover an oocyte and/or if the procedures do not result in a pregnancy, Owner's damages shall be limited to EMS's continuing obligation to complete the same subject to the following limitations (all at the Owner's sole expense and risk):

If EMS is unable to produce a pregnancy from the Donor Mare, EMS or Owner shall have the right to declare this Contract terminated. In such event, Owner shall (a) pay to EMS all sums due under this Contract and (b) arrange for the transportation of Donor Mare (at Owner's sole expense and risk) to Owner. As a further limitation, if any recovery of an oocyte or pregnancy production be unsuccessful, EMS's continuing obligation to complete the same shall terminate at the end of the calendar year. Thereafter this Contract shall be deemed terminated and the Parties shall have no further obligations to one another.

12. Owner acknowledges there is slight but inherent risk in production of embryos and handling and storage of embryos, semen, and oocytes, and, except in the case of willful misconduct or willful negligence of EMS, Owner agrees to indemnify and hold EMS harmless for any loss or damage to semen, oocytes, or embryos, damage by contamination, mishandling, or production of embryos with incorrect parentage. If embryos, semen, or oocytes are thawed, lost or damaged, or if embryos are produced with incorrect parentage, due solely to the willful negligence or willful misconduct of EMS, the maximum amount for which EMS may be responsible or liable is: a) for each straw of semen lost or damaged, the estimated value of the initial production costs to collect and process the semen; b) for each embryo that is lost or damaged, the estimated value of the embryo will be the fees charged by EMS at the time of its production; and c) if incorrect parentage is found from genetic analysis of embryo or foals resulting from embryos, the estimated value of the loss will be the fees charged by EMS for fertilization, embryo production, vitrification, and storage.

13. Owner understands that while this procedure has a good safety record, trans-vaginal follicular aspiration is an invasive procedure and carries inherent risk. That risk, while low, can include, but is not limited to, such things as infection, drug reaction, hemorrhage, injuries from horse behavior, and rectal perforation.

14. Owner agrees to place a valid credit card on file with EMS for payment of the fees in this contract.

15. EMS reserves the right to refuse or suspend service when the Owner's account is past due.

16. It is understood by the Parties that if the owner desires that an embryo be frozen Owner will pay EMS \$300.00 for that service as well as a monthly storage fee. It is further understood that when the embryo is transferred to a Recipient Mare in the future Owner will pay the fees for embryo thawing, embryo transfer, and Recipient Lease currently in force at EMS for that year.

17. It is specifically understood and agreed between the Parties that if Owner desires an embryo to be transferred into a recipient mare and an appropriate recipient mare is not available at that time, that the embryo will be frozen and stored until it can be thawed and transferred into an appropriate recipient mare. Owner agrees to pay all fees associated with freezing, storing, and thawing the embryo(s).

18. It is specifically understood and agreed between the Parties that if Owner desires embryo biopsy and Pre-Implantation Genetic Diagnosis (PGD), Owner will pay to EMS \$500.00 for that service. It is further understood by the Parties that the success of embryo biopsy and PGD relies on many factors and while EMS will use its best efforts toward the success of the procedures, EMS does not guarantee results of those procedures. The Parties agree that if a pregnancy is to be terminated before 30 days of gestation due to the results of PGD, Owner will pay EMS \$700.00 for the use of the recipient mare during that cycle.

19. It is specifically understood and agreed between the Parties that prior to the transporting of the Recipient Mare or the Donor Mare from EMS, all charges for services rendered in this Contract shall be paid in full. Further, by filing this Contract along with a detailed itemization of the unpaid charges owed to EMS by Owner, EMS shall have a possessory lien on the Donor Mare as well as the Recipient Mare and the fetus.

20. With regard to the transportation of the Donor Mare and the Recipient Mare, all risk of loss shall be borne by Owner, and all transportation expenses shall be paid by Owner. Three business days notice must be provided to EMS by Owner prior to discharge of Donor or Recipient mares to allow for processing of mares and paper work. All Donor Mares and Recipient Mares shall be picked up and delivered during regular business hours. Owner agrees to pay EMS \$75 for each delivery or pick up not during regular business hours.

21. For all purposes, this Contract shall be deemed to be negotiated, made and signed in Boone County, Missouri and the laws of Missouri shall control. At EMS's election, any litigation regarding the Contract shall occur in Boone County, Missouri.

22. This Contract is the final and complete agreement of the Parties and there are no other terms of the Parties in agreement other than those contained in this document.

23. This Contract shall be binding upon the Parties and their respective heirs, personal representatives, successors and assigns.

As Evidence of This Contract, the Parties have signed and dated this Contract as indicated below.

Owner's Signature

Authorized Representative of EMS

Dated: _____

Dated: _____

Owner's Billing Address: _____

Telephone: _____ Email: _____

Donor Mare Registered Name: _____

Breed: _____ Age: _____ Height/Weight: _____

M/C/ Visa/ Discover/AMEX#: _____ Exp. Date: _____ CVV: _____

After initial fees, would you prefer us to run the card: monthly _____ or call first _____?

Name on Credit Card: _____

Credit Card billing address: _____

Preferred method of invoicing: email _____ or mail _____?

If applicable:

Agent name, address, and telephone number to contact for ICSI coordination/ updates:

_____ email: _____

_____ Telephone: _____

_____ Preferred: email _____ telephone _____