



# ST DAVID'S EQUINE FACTSHEET

## ARTIFICIAL INSEMINATION AND EMBRYO TRANSFER

Recent advances in equine artificial insemination and embryo transfer have significantly improved the success of these techniques. There is no doubt that these artificial breeding techniques now offer realistic alternatives to natural breeding.

**Artificial insemination** involves placing processed semen from a stallion into the uterus of a mare. The technique can use fresh, chilled, or frozen semen. Improved techniques have dramatically improved conception rates for chilled and frozen semen and the option to use frozen semen has greatly increased the selection of stallions available to breeders.

Artificial insemination may be considered for a mare that cannot easily be taken to a stallion or when the chosen stallion is unavailable for natural coverings, for a mare that cannot be bred naturally, or where a decision has been made to breed her at home.

**Embryo transfer** involves flushing an embryo from a donor mare and placing it into the uterus of a recipient mare. Donor mares can be bred naturally or by artificial insemination. Once an embryo has been recovered from a donor mare it can be placed directly into a recipient mare, or placed in a holding solution and transported to a recipient mare within 24 hours. It is also possible to freeze an embryo in liquid nitrogen and store it for later use.

Embryo transfer would be suitable for a mare that, although able to conceive, is not able to successfully carry a pregnancy to term, or where there is the possibility of serious complications at foaling. It can also be used for a competing mare enabling her to be bred without interrupting her schedule for more than a short time. The technique also offers the possibility of multiple progeny from one mare in the same year, although it is important to establish with the relevant breed society how many progeny can be registered each year. The ability to freeze and store embryos for indefinite periods now adds a further dimension to the applications of this technique.

The suitability of an individual mare for artificial insemination or embryo transfer should always be established before making any decision to try either technique. This would normally involve reviewing any breeding history and performing a breeding soundness examination of the mare in question. It should be stressed that whenever artificial breeding is being considered owners must be aware of any rules regarding the use of such techniques that may exist for the relevant breed.

If you are considering breeding from your mare by artificial insemination or embryo transfer please contact the practice for advice regarding the selection of the appropriate method, what the likely costs will be, and what degree of success you might reasonably expect.

**St David's is the only practice in the region to have a dedicated stud vet.**