

# **Equine Veterinary Services**

# Artificial Insemination Information and Recommendations

# Advantages of Artificial Insemination with Chilled or Frozen Semen

Artificial insemination with chilled or frozen semen gives mare owners access to a much wider genetic pool than can be achieved with natural cover. Semen may be sourced from interstate or even internationally and considerable expense can be saved by not having to ship mares long distances.

In addition insemination can reduce the risk to mares of injury or infection at the time of service. It is gen-

erally accepted that insemination results in less contamination of the mares reproductive tract and this may be especially significant for older mares.

Artificial insemination also allows more mares to be covered by any given stallion, and it may assist in the effective use of older valuable stallions with poor semen characteristics.

All semen will be examined for motility and morphology at the time of insemination and this can also help identify potential fertility problems early.



### Frozen Semen

Frozen semen can be stored indefinitely and used as and when required, however there are still some disadvantages in its use. Whilst fresh semen may remain viable in the uterine tract for 3 to 5 days frozen semen has a much shorter life span, and is generally expected to remain viable for 6 to 12 hours only. This means that the time of insemination must closely align with the time of ovulation for the mare. Therefore the mare may be given a drug to encourage fixed time ovulation and the mare's ovaries will be examined at least every six hours until she ovulates. Conception rates are generally accepted to be lower than for a natural

service, and can range from 30% to 70 % per cycle depending on the quality of the stallions semen.

Frozen semen also requires constant maintenance in liquid nitrogen tanks which necessitates a storage fee being charged. This will vary according to the quantity and duration of the storage

## **Chilled Semen**

Chilled semen comprises a fresh semen sample that is collected from a stallion with the use of an artificial vagina. The semen is then checked, modified with semen extender and chilled to prolong

the lifespan of the sperm. This allows for transportation of the semen to a distant mare by courier or overnight express post.

Chilled semen can remain viable for 24 to 48 hours in the mares reproductive tract and therefore the mare is usually inseminated only once 12 to 24 hours before the anticipated ovulation. In order to coordinate the timing of the semen shipment, insemination and ovulation, the mare must be monitored closely.