

Breeding a horse can be a complex and often costly endeavor. Several evaluations, examinations, and assessments are necessary prior to considering pregnancy. Acquiring knowledge of the fundamental physiology and anatomy of the mare is essential for understanding the processes involved in producing healthy foals.

Reproductive Anatomy:

Mares have two ovaries located above the kidneys, which produce eggs and female hormones like oestrogen and progesterone. The uterus has two horns and a body, suspended by the broad ligament. The cervix guards the uterine entrance from the vagina.

Figure 1: The mare's reproductive system

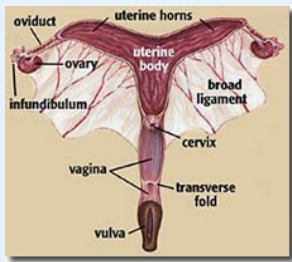
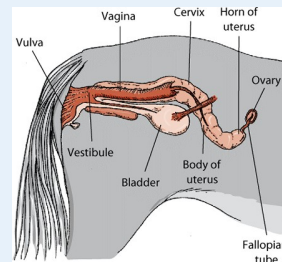
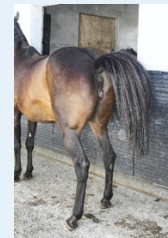


Figure 2: The mare's reproductive system in situ



The oestrus cycle:

In the Northern Hemisphere, mares are generally sexually active from April to September with most breeds inactive in winter (anoestrus). As spring arrives and daylight increases, melatonin levels drop, triggering a transitional period with rising hormones and ovarian follicle growth. One dominant follicle eventually ovulates, leading to regular oestrus cycles throughout summer. Each cycle lasts about 21 days, with mares receptive for 3-8 days and showing behaviours like posturing and accepting stallion attention.



Preparing your mare for stud

Before sending your mare to stud, ensure she has ideally a vet check to confirm breeding fitness. This may require stocks, though calm mares might be assessed at the stable door. A typical breeding soundness exam includes:

- Physical examination
- Rectal examination
- Ultrasound scan
- Reproductive examination

During this process, clitoral swabs screen for Contagious Equine Metritis (CEM) bacteria, and blood tests check for viral infections like Equine Viral Arteritis (EVA) and Equine Infectious Anaemia (EIA) can be obtained if needed.

Pre-stud checklist

Before sending your mare to stud, ensure the following are up to date:

- Vaccinations (tetanus, influenza, and equine herpes virus—required by many studs)
- Worming
- Dental health
- Hoof care
- Physical condition

Most stud farms isolate new arrivals for two weeks to check for untested infections. If your pregnant mare will foal at a stud, confirm with the facility, arrival may be needed 3–4 weeks before her due date.

Covering

Mares may be bred either by natural mating with a stallion or through artificial insemination (A.I.). A.I. enables breeders to use semen from stallions worldwide, collected via an artificial vagina and then used immediately or stored and transported. Vets can induce ovulation in mares, minimizing the need for multiple coverings. A.I. involves collecting semen from a stallion, (often by mounting a teaser mare or dummy), which is then placed in a mare's uterus using an insemination catheter inserted through the cervix. Semen may be used fresh, chilled, or frozen. Advantages of A.I. include lower risk of venereal disease and injury due to lack of direct contact and allows breeding across different locations.

If you are thinking about breeding your mare, contact your veterinary surgeon who will be able to provide further guidance.