**Venereal diseases**

Venereal diseases are those that can be sexually transmitted. and "Vener" is the Latin term for sexual intercourse. and, hence, the origin of the term "venereal."Sexually transmitted diseases include bacterial, viral, or protozoal infections.

**Venereal diseases in cattle**

**Vibriosis**

Vibriosis is a venereal disease causing infertility and, occasionally, abortion. It is caused by the bacterium ***Campylobacter fetus***, which lives in the crevices of a bulls prepuce, but usually does not become established in the bull until it is about 4 years old or older.

Vibriosis is spread from an infected bull to a cow during the breeding act. Bulls also may be infected by breeding infected cows. Although semen from reputable bull studs is usually ÒcleanÓ because of proper health examinations of the bulls and treatment of semen, this disease can be transmitted through artificial insemination if these precautions are not taken. Untreated, infected bulls can remain carriers for a long time.

Vibriosis in females causes endometritis, resulting in failure to conceive or death of the embryo. Affected cows may conceive and not return to heat 21 days later. However, the newly formed embryo may then die, become absorbed by the cow and then she may exhibit estrus from 27 to 53 days after breeding. Abortions late in gestation can occur, but are unusual.

Diagnosis is difficult and depends on identifying cultures of the organism from the genitalia of the infected cow or bull, or from the abomasum (fourth stomach chamber) of an aborted fetus. Prevent vibriosis by vaccinating cattle, using artificial insemination, treating infected animals, or combining all three.

**Trichomoniasis**

A protozoan organism, ***Trichomonas fetus***, causes trichomoniasis It is also a venereal disease. Symptoms include occasional abortions and pyometra (pus in uterus) that impairs breeding efficiency. Pyometra develops after the infected cows embryo dies. To treat the female, treat any uterine infection and provide sexual rest. Usually a 90-day period of sexual rest eliminates the organisms from the uterus. Vaccination is also an option in cows. Before use, test bulls, except virgins, through culture methods at least three times at weekly intervals. Using clean semen from reputable bull studs also prevents infection. Frozen semen containing the organism can cause infection if put into the uterus.

Infected bulls show no signs of disease but may harbor the trichomonads for long periods unless specific treatment is administered.

**Venereal diseases in equine**

**Dourine**

Dourine is caused by the protozoan parasite, **Trypanosoma equiperdum** and is a serious, often chronic, venereally transmitted disease of horses and other equids.

Clinical signs of dourine are highly variable in manifestation and severity. The disease is characterized mainly by swelling of the genitalia, cutaneous plaques and neurological signs but severity varies with the virulence of the strain, the nutritional status of the horse, and stress factors.

Genital oedema and reproductive tract mucopurulent discharges are often the first signs. mares develop a mucopurulent vaginal discharge, and the vulva becomes oedematous; this swelling may be marked leading to vaginal prolapse and extend along the perineum to the ventral abdomen and mammary gland and may result in depigmentation. Abortion can occur with more virulent strains. Stallions develop oedema of the prepuce and glans penis in some cases and can develop a mucopurulent urethral discharge. The swelling may spread to the scrotum, perineum, ventral abdomen and thorax and may also become depigmented.

Characteristic raised oedematous patches 2-10 cm in diameter (sometimes called ‘silver dollar plaques’; arrowed left) may appear on the skin on the neck, hips, lower parts of the abdomen and particularly over the ribs.

*Trypanosoma equiperdum*, which unlike other trypanosomal infections, is sexually transmitted during natural mating or by artificial insemination (AI) with infected semen.Transmission from stallions to mares is more common, but mares can also transmit the disease to stallions.

clinical diagnosis is not always possible and laboratory diagnosis is necessary to confirm diagnoses of dourine.

There is currently no effective treatment for dourine although treatment has been attempted with quinapyramine sulphate (3 mg/kg, given subcutaneously). However, *T. equiperdum* may persist in asymptomatic carrier horses after treatment and these horses are considered unsafe for breeding purposes.

**Contagious Equine Metritis**

A bacterial venereal disease of considerable significance is contagious equine metritis (CEM).

 This disease, caused by the bacterium ***Taylorella equigenitalis***.

Contagious equine metritis is transmitted primarily via breeding, but mechanical transfer from a carrier or infected animal can occur. The clinical signs in mares affected with CEM develop 8-10 days after being covered or inseminated with infective semen and consist of a copious, grayish vulvar discharge. Most mares are reported to recover spontaneously, with the microorganism persisting in the reproductive tract of some for weeks, months, or years after recovery--these mares become asymptomatic carriers. Stallions do not develop any clinical signs, and many become asymptomatic carriers.

The diagnosis of CEM is based primarily on culturing the organism from the genitourinary tract of infected horses. In mares, swabs are taken from all accessible sites of infection--the endometrium (lining of the uterus), cervix, and clitoris.

In stallions, samples are generally taken with the penis erect by swabbing preputial folds, and surface of the penis, and urethra.

No one treatment will guarantee resolution of clinical signs (if present) and clearance of the organism.

In mares, the clitoral sinuses and fossa are thoroughly irrigated with a 4% solution of chlorhexidine and are packed with a 0.2% nitrofurazone ointment or equivalent. This regimen is repeated for five consecutive days. Some mares might require several courses of treatment before the organism is eliminated.

For males contaminated with the organism, The urethral fossa and sinus, prepuce, and penis are thoroughly cleansed with a 2% solution of chlorhexidine. After drying, 0.2% nitrofurazone ointment or its equivalent is liberally applied to the external genitalia. Treatment is repeated daily for five days. One course of treatment usually is adequate to eliminate the organism from the reproductive tract of the stallion.

**Venereal disease of sheep**

**Ram Epididymitis**

Ram epididymitis is a reproductive disease that causes inflammation of the [epididymis](http://www.infovets.com/books/smrm/K/VetG.htm%22%20%5Cl%20%22E).it causes varying degrees of damage that can result in infertility and a reduced capacity to produce viable spermatozoa. Ram epididymitis is usually a condition of mature, sexually experienced rams. This disease is not recognized in goats.

This inflammation is caused by ***Brucella ovis (B. ovis)*.**

A non-infected ram picks up the disease by homosexual activities or during the breeding season via the ewe. The *B. ovis* organism enters the blood stream of the ram through the mucous membranes of the penis and infects the reproductive tract and epididymis. The organism escapes from an infected ram through urine or semen. The ewe, although not permanently infected, plays a role in the mechanical transmission.

Enlargement and fibrosis (scarring) of the epididymis with shrinking of the testicular tissue is the classic clinical sign. In many cases, however, the infection of the secondary sex organs (prostate, bulbourethral gland) occurs without the epididymis being infected. which results in impaired semen production and lowered semen quality.

In some cases, *B. ovis*infections in ewes can cause [abortions](http://www.infovets.com/books/smrm/K/VetG.htm#A) or death of newborn lambs.

Diagnosis of *B. ovis* induced ram epididymitis is by palpation of the testicle and epididymis for fibrotic lesions; however, this method does not detect those animals with infection of the secondary sex organs. These rams must be diagnosed by semen examination for the presence of white blood cells (WBC) and spermatozoal abnormalities. Currently, the enzyme linked immunosorbent assay (ELISA) is being used for early detection of*B. ovis* infections.

Antibiotic treatment of *B. ovis* is disappointing because about half the cases will not respond, and many animals continue to have decreased fertility. Prevention is based on eradicating the disease from an infected flock and purchasing disease free rams.