

**BOVINE VENEREAL DISEASES****Subha Ganguly\***

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**ABSTRACT**

With the increased use of natural service in many dairy herds, the potential exists for venereal diseases to affect reproductive performance. These diseases have generally been of very minor concern to the dairy industry because of the widespread adoption of artificial insemination.

**KEYWORDS:** Cattle, Venereal disease.

**INTRODUCTION**

*Trichomonas foetus* (Genital trichomoniasis) and *Campylobacter fetus* *subsp. venerealis* (Vibrio) are the two organisms that are most often associated with venereal disease in cattle. *Trichomonas* and *Campylobacter* infections can cause early embryonic death or first trimester abortions. Young bulls usually 'clear' the organisms quite

rapidly, but become reinfected upon breeding a cow that is carrying an infection. <sup>[1]</sup> Once the organisms are present in the herd, they can be passed from cow to cow by the herd bull(s) or by contaminated breeding equipment. Older bulls (aged 4-5 yrs and above) are more often chronically infected. A 'dirty' white vaginal discharge can occur 1-2 weeks after becoming infected at breeding time. Cows are able to develop immunity to these organisms, although they can still be infected for up to 3 weeks before the infection is cleared. *Campylobacter* is occasionally associated with abortion during months 4-7 of gestation. <sup>[2]</sup>

**Mycotic causes of abortion**

Fungi can also cause abortions in dairy cattle, most often in the last 2 months of gestation, although they have been observed to occur as early as 60 days. The mold spores are thought to reach the placenta and fetus through the blood supply of the cow, although the way that they gain access to the circulatory system is not well understood. <sup>[3]</sup>

These usually occur during the winter and spring months, since this is when cows are often kept in total confinement and can be exposed to moldy hay or silage. Fungal abortions tend to occur sporadically although on some occasions a significant percentage (10-20 %) of the pregnant animals in a herd may be affected. Rarely, before or after an abortion due to *Mortierella wolfii*, the cow may develop a severe pneumonia. <sup>[4]</sup>

*Neospora caninum* is a protozoal parasite that does not appear to cause any disease in mature cattle, except for abortions. Abortions due to *Neospora* usually occur sporadically in a herd in the middle of gestation (4-5 months), although they can occur anywhere from about 3 months onward. <sup>[5]</sup> A commercially-produced *Neospora* vaccine has recently become available. There is not yet enough information to decide if and when it's economically advantageous for herds to use this product. <sup>[5]</sup>

## CONCLUSION

Also, animals that have aborted once due to *Neospora* are at increased risk of doing so again if they remain in the herd and become pregnant again. Fetuses that are not aborted, while usually appearing to be normal calves, are often infected with the protozoa for life. Usually, *Neospora*-caused abortions do not present as an abortion storm, although this does occasionally occur. Many cows in a herd can be infected with *Neospora* and not abort, although they are more likely to do so than their uninfected herdmates. <sup>[6]</sup>

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