

MILL CREEK VETERINARY SERVICES: HERD HEALTH TIPS

Bovine Protozoal Abortion

Bovine protozoal abortion is the single largest cause of abortion in California dairies, and appears to be widespread throughout the world. It is caused by a protozoal parasite, *Neospora sp.* Not much is known yet about this parasite, but it is thought to be shed by unknown animal hosts into feed and water. Cattle ingest the parasite which then infect multiple body tissues. Infected cattle show no outward signs, yet the parasite may remain in the cow for life, eventually infecting the fetus during pregnancy. Abortion of an infected fetus may or may not occur. Infected cattle may abort multiple times. If abortion does occur, it is usually between 4-7 months of pregnancy. Cows with the *Neospora* parasite can be expected to give birth to infected calves, and these infections appear to be lifelong. Infected calves can be born alive and appear outwardly normal or have walking or limb problems.

Diagnosis of infected cows can be done with blood sampling. Not all cattle with the parasite abort. Fresh aborted fetuses are excellent samples for an accurate diagnosis.

Abortion storms and/or chronic herd abortion problems may occur. There is currently no proven effective means of control, prevention, or treatment of the disease, yet below are the most current recommendations which may help control and prevent this cause of abortion.

Strategies to control infection focus on 2 main areas

1) Reduce infection of the fetus/calf:

a) Reduce infection in the herd (infected cows give birth to infected offspring)- if possible remove infected cows from herd or those that aborted due to *Neospora* parasite. This may be impractical if there is a high prevalence of infected cows in the herd. A more conservative/gradual approach is to test daughters of cows known to be infected or that have aborted in the past and don't use them as replacements if positive.

b) Minimize infected replacements- infection can be reduced by permitting only seronegative (blood tested negative) female replacements, including heifer calves born to known infected cows.

2) Reduce infection of cows: although the exact method adult cattle get infected is not fully understood:

a) Minimize exposure from possible animal carriers and their feces- possible animals that may spread this disease include any carnivore (dog, cat, coyotes, etc...), birds, rats, mice, etc... Cattle would become infected if they consumed feces of these animals. Remove fetuses, dead calves and placentas that may be eaten by carrier animals. Maximize rodent control, cover feed/commodities to help reduce bird contamination, minimize number of dogs and cats on the dairy, and remove feces from feed bunks and feed areas.

b) Minimize exposure of infected tissues to cows- cattle could become infected by licking or eating tissues infected with *Neospora* after calving or abortion. Ways to prevent this include prompt disposal of fetuses and afterbirth, use of individual calving pens, and separating positive cows at calving.

*****CONSULT ANY VETERINARIAN AT MILL CREEK WITH QUESTIONS*****