

Infectious Abortion in Cattle

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Infertility and abortions in cattle are two of the greatest problems the cattle breeder faces. The causes are complex and difficult to identify. This publication suggests and briefly outlines some of the more common diseases and control measures.

In case of abortions, call your veterinarian immediately and have the following information and/or material available.

1. Identify aborting cows and isolate them from the rest of the herd. This helps prevent spread of infection and makes them available for examination.

2. Save fetuses and fresh placentas. Refrigerate at 38° to 45° F. (*Do not freeze*). Wrap in plastic or other waterproof material. Do not cut or wash the fetus or placenta.

3. Have a good history of your herd vaccinations, movement of cattle to and from other premises, and management and origin of bulls.

4. Keep records of the reproductive history of cows, including number of abortions, conception rate, and approximate breeding dates.

Below is a rough guide to help you determine the age of an aborted fetus:

Length of gestation	Description of fetus
Two months	Size of a mouse
Three months	Size of a rat
Four months	Size of a small cat
Five months	Size of a large cat
Six months	Size of a small dog (hair around eyes, tail, muzzle)
Seven months	Fine hair on body and legs
Eight months	Hair coat complete, incisor teeth slightly erupted
Nine months	Incisor teeth erupted

Diseases Causing Abortions in Cattle

Disease	Organism	How spread	Stage of gestation at abortion	Samples needed for diagnosis	Vaccination	Remarks
Leptospirosis	Bacterial (Leptospira—at least five serotypes)	Urine of infected animals; contaminated water; aborted feti.	Any stage, usually 6-9 months	Blood sample from aborting cow and others in the herd.	Killed vaccine gives immunity for 12 months.	Laboratory should determine the type of lepto causing infection. Annual vaccination.
Brucellosis	Bacterial (Brucella abortus)	Aborted feti, uterine discharges and placentas; infected premises.	6-9 months	Blood sample from aborting cow; fetus; placenta.	Live vaccine in heifers. Dairy: 3-6 mo. Beef: 3-10 mo.	Infected animals are culled. Do not vaccinate bulls.
Foothill abortion (EBA)	Viral (Psittacoid virus)	Unknown (suspect wild animal reservoir in foothills with parasite vector).	6-9 months	Fetus; blood sample; placenta.	None	Aborting animals usually are immune and should be retained in the herd.
Red nose (IBR)	Viral	Infectious from cow to cow.	6-9 months	Fetus; placenta; blood samples.	Live vaccine	Use intranasal vaccine on pregnant animals. Abortion may or may not be associated with illness in cow.



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Diseases Causing Abortions in Cattle (Cont.)

Disease	Organism	How spread	Stage of gestation at abortion	Samples needed for diagnosis	Vaccination	Remarks
Virus diarrhea (BVD)	Viral	Contagious from cow to cow.	Variable, usually early in gestation	Two blood samples, 3 weeks apart.	Live vaccine. Vaccinate animal after 8 months of age.	Calves born with disease (loss of hair, and brain damage).
Vibriosis	Bacterial (Vibrio fetus venerealis)	Venereal disease spread by infected bulls.	Early abortion, repeat breeding	Vaginal mucus from infected cow; cervical mucus tampons; fetus; preputial washings from bull.	Two injections of killed vaccine the first year, 30-60 days before breeding.	More often causes infertility as evidenced by high percentage of open cows. Also causes abortions. Bulls can be carriers for several years if not treated.
	(Vibrio fetus intestinalis)	Ingested	\pm 6 months	Fetus	None	Sporadic abortions.
Trichomoniasis	Protozoan	Venereal disease spread by infected bulls.	2-4 months	Preputial washings from infected bulls; uterus from cull cow.	None	Treatment consists of sexual rest of cows for 60-90 days; artificial insemination; cull infected bulls.
Listeriosis	Bacterial	Carried by rodents and other animals; moldy roughage.	Variable	Fetus; placenta; blood from cow.	None	Uterine infection; illness in cattle (circling disease).