

Diseases Causing Abortions in Cattle

Richard F. Hall

Extension Veterinarian

Infertility and abortions in cattle are two of the greatest problems the cattle breeder faces today. Diseases causing abortions are many and complicated. It is the purpose of this publication to point out what to do in case of abortions and briefly outline some of the more common diseases and their control.

In case of abortions, contact your veterinarian immediately and have the following information and/or material for him:

1. Identify aborting cows and isolate them from the rest of the herd in a corral or pen. This helps prevent spreading infection and makes them more available to examine.
2. Save fetuses and fresh placentas by refrigerating at 38° to 45°F. (DO NOT FREEZE, if possible.)
 - a. Wrap in plastic or other water proof material to keep clean and help prevent spreading infection.
 - b. Do not cut on the fetus or placenta or wash them.
3. Have a good history of your herd vaccinations, movement of cattle to and from other premises, management of bulls, and the origin of bulls.
4. Breeding history on cows such as number of abortions, open cows in previous years, and approximate breeding dates.

Below is a rough guide to help you determine the stage of gestation 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 (term calf)	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 Pomona)	Urine of infected animals; contaminated water; aborted feti.	6-9 months	1) 2 blood samples from aborting cow 2 weeks apart. 2) Fetus	Killed vaccine gives immunity for 12 months.	Big herds should vaccinate when bulls are turned in. Recovered animals shed organisms in urine for several months.
Brucellosis	Bacterial (Brucella abortus)	Aborted Feti, uterine discharges and placentas; infected premises.	6-9 months	1) Blood sample from aborting cow 2) Fetus 3) Placenta	Live vaccine in heifers 3- 8 mo.—Dairy 3-10 mo.—Beef	Infected animals are culled. Cannot vaccinate bulls in Idaho.
Foothill Abortion (EBA)	Viral (Psittacoid virus)	Unknown (suspect wild animal reservoir in foothills with parasite vector.	6-9 months	1) Fetus 2) Blood sample 3) 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	1) Fetus 2) Placenta 3) Blood sample	Live vaccine	Vaccine may cause abortions if used on pregnant animals. Abortion may or may not be associated with illness in cow.
Virus Diarrhea (BVD)	Viral	Contagious from cow to cow.	Variable	1) 2 bloods 3 weeks apart 2) Fetus	Live vaccine. Vaccinate animal after 8 months of age.	Abortion may occur 3 months after cow is ill. Pregnant animals should not be vaccinated.
Vibriosis	Bacterial (Vibrio fetus venerealis)	Venereal disease spread by infected bulls.	2-6 months	1) Vaginal mucous from infected cow 2) Blood from cow 3) Fetus 4) Preputial washings from bull	2 injections of killed vaccine the first year 30-60 days before breeding. Yearly booster recommended.	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	± 6 months	Fetus	None	Sporadic abortions
Trichomoniasis	Protozoan (Trichomonas fetus)	Venereal disease spread by infected bulls.	2-4 months	1) Preputial washings from infected bulls 2) 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.	Variable	1) Fetus 2) Placenta 3) Blood from cow	None	Decomposition of fetus; uterine infection; illness in cattle and loss of weight.

PUBLISHED AND DISTRIBUTED IN FURTHERANCE OF THE ACTS OF MAY 8 AND JUNE 30, 1914,
BY THE UNIVERSITY OF IDAHO AGRICULTURAL EXTENSION SERVICE, JAMES E. KRAUS,
DIRECTOR; AND THE U.S. DEPARTMENT OF AGRICULTURE, COOPERATING.

James E. Kraus

JAMES E. KRAUS, Director