

Bovine Viral Diarrhea virus (BVDV) is widespread in the cattle population and capable of causing serious clinical disease in cattle. A wide range of disease manifestations may be observed and outcome of infection depends on numerous host factors, such as immune status of the cow, pregnancy status and gestation of the fetus, and/or concurrent infections, to name a few.

Within the U.S. cattle population, there are three major subtypes, BVDV 1a, BVDV 1b and BVDV 2; the BVDV 1b subtype being the most predominant. The disease is primarily maintained and spread by persistently infected individuals; therefore, the majority of control programs are aimed at identification of these individuals.

The Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) offers a variety of testing options to assist with the diagnosis and management of BVDV.

CONDITION	SAMPLE TYPE	TEST	PRICE
Persistently Infected (PI)	Ear notch (fresh) or serum (from animal >3mo old)	Ag-Cap-ELISA	\$6.50
	Ear notch (fixed)	IHC	\$20.00 for first; \$7.50 additional
	Ear notch (fresh), serum (animal >3mo old for VI) or EDTA blood	VI	\$30.00
	Individual ear notch, serum or EDTA blood; individual or pooled bulk milk tank	PCR	\$25.00
Mucosal disease	EDTA blood, spleen, intestine, Peyer's patches	VI	\$30.00
Abortion/Still birth	Fetal lung, spleen	PCR or VI	\$25 / \$30
Respiratory	Live: nasal & conjunctival swabs	PCR or VI	\$25 / \$30
	Dead: lung, spleen	PCR or VI	\$25 / \$30
Enteric	Live: rectal swab or feces	PCR or VI	\$25 / \$30
	Dead: intestine, spleen, mesenteric lymph nodes	PCR or VI	\$25 / \$30

## SEROLOGY TESTING

Live animals	Serum: paired samples ~14-21 days apart, 8-10 animals from a herd	VN	\$6.50/serotype
Still birth/abortion	Fetus: fetal blood, pericardial or pleural fluid	Ag-Cap-ELISA or VN	\$6.50 \$6.50/ serotype
	Cow: serum (interpretation: .1:1000 maternal antibody titer suggestive of fetal infection)	VN	\$6.50/ serotype

Often, there are no outward signs that the animal is persistently infected with BVDV and many diseases present as co-infections with BVDV as the root cause:

- Bovine Herpesvirus-1 (IBR)
- Parainfluenza-3
- Bovine Respiratory Coronavirus
- Pasturella
- Mycoplasma
- Histophilus

Working with your veterinarian, you can determine the appropriate test for your animal based on its symptoms. Once it is determined that cattle are infected with BVDV, it is best to consult a veterinarian for recommended disease management options.

For questions regarding diagnostic testing for BVDV, contact TVMDL at one of our full service locations, Amarillo or College Station.

