

# BVD Test Selection Guide

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 gestational age 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   |
|----------------------------|---|--|
| Persistently Infected (PI) | Ear notches (fresh) packaged separately   | Pooled PCR + Antigen Capture ELISA on positive pools |
|                            | Ear notch (fresh) or serum (animal >3mo old)  | Antigen Capture ELISA                                |
|                            | Ear notch (fresh), serum (animal >3mo old), or EDTA blood                                 | VI   |
|                            | Individual ear notch, semen, or EDTA blood  | PCR  |
| Mucosal disease            | EDTA blood, spleen, intestine, Peyer's patches  | VI and/or Histopathology                             |
| Abortion/Still birth       | Fetal lung, spleen, abomasal contents   | PCR or VI  |
| Respiratory                | <b>Live:</b> nasal & conjunctival Dacron swabs; <b>Dead:</b> lung, spleen                 | PCR or VI  |
| Enteric                    | <b>Live:</b> rectal swab or feces; <b>Dead:</b> Intestine, spleen, mesenteric lymph nodes | PCR or VI  |
| <b>Serology Testing</b>    |   |  |
| Live animals               | Paired serum samples ~14-21 days apart, 8-10 animals from a herd                          | VN   |
| Still birth/abortion       | Fetus: fetal blood, pericardial or pleural fluid  | Antigen Capture ELISA and/or VN                      |
|                            | Dam: serum  | Antigen Capture ELISA and/or VN                      |

Please visit [tvmdl.tamu.edu](http://tvmdl.tamu.edu) to view current test prices.