GUIDELINES FOR CHOOSING THE APPROPRIATE TEST:

Surveillance for Bovine Viral Diarrhea Virus (BVDV) in live animals remains a critical component of overall bovine health and reducing the potential respiratory disease outbreaks. The type of BVDV testing depends on the situation in the herd and specimen submitted. Testing of nursing calves (< 3 months) can be associated with false negative results due to maternal antibody.

Appropriate live animal specimens to submit to OADDL for the detection of BVDV include:

**Ear Notch:** at least 1cm x 1cm piece
- **Fresh** (in saline) submitted on ice packs:
  - Antigen capture ELISA for identification of acutely infected and PI animals.
- **Formalin** fixed ear notch:
  - Immunohistochemical (IHC) staining for identification of PI animals (one week turn-around)

**Serum:** at least 2-3 ml
- **SN** (serum neutralization, antibody titer):
  - 3 day test, set up twice per week (generally Mon & Fri)
  - This test is **useful** in determining antibody response to vaccination and required for some import/export testing.
  - This test does **not** differentiate between acute infection and PI animals.
- Antigen capture ELISA:
  - Positive in acute infection and in PI animals.
  - Not appropriate for nursing calves (< 3 months old).

**Whole blood (EDTA sample):** at least 5 ml
- **PCR** (polymerase chain reaction):
  - Positive in acute infection and PI animals.
  - 1-3 day turn-around time.
- **Virus Isolation**:
  - Positive in acute infection and PI animals.
  - Three week (21 day) turn-around-time.
  - Can be required for some import/export testing.

**Semen:** 2 frozen straws
- **Virus Isolation**- forwarded to a referral laboratory