

BOVINE ABORTION DIAGNOSIS
Washington Animal Disease Diagnostic Laboratory

<i>Abortion Cause</i>	<i>Specimen of Choice</i>	<i>Assay</i>
IBR virus (BHV-1)	Fixed fetal tissues and placenta Paired maternal sera	H, IHC S
BVD virus	Fixed fetal tissues and placenta Fresh spleen, lung, liver Maternal blood (PT) Paired maternal sera (RT)	H, IHC PCR, VI PCR S
Bluetongue Virus	Fixed fetal tissues and placenta Fresh spleen and brain, maternal blood (PT) Paired maternal sera (RT)	H VI, PCR S
<i>Neospora caninum</i>	Fixed fetal tissue Maternal sera (RT) (Herd basis)	H, IHC, PCR S
<i>Sarcocystis cruzi</i>	Fixed fetal tissue (brain, heart, liver,placenta)	H
Leptospirosis	Fixed fetal tissues and placenta Fetal thoracic fluid Fetal kidney Maternal urine Paired maternal sera (RT)	H, IHC FA FA FA S
<i>Listeria monocytogenes</i>	Fixed fetal tissues Fresh fetal liver, spleen, stomach contents	H, IHC Culture
<i>Brucella abortus</i>	Fixed fetal tissues and placenta Fresh fetal stomach contents, liver, lung, spleen, placenta Maternal sera *	H Culture S
<i>Tritrichomonas foetus</i>	Fixed fetal tissues and placenta Fresh placenta, stomach contents, lung Preputial and vaginal fluid	H Culture
Epizootic Bovine Abortion	Fixed fetal tissues	H
<i>Campylobacter fetus var. venerealis</i>	Fixed placenta and fetal tissues Fresh fetal fluids, stomach contents, placenta, liver	H Culture
<i>E. coli</i> (Endotoxin) (secondary to mastitis)	Fetal tissues and stomach contents	Culture
<u>Mycoses</u> (<i>Aspergillus, Absidia, Mucor, Rhizopus</i>)	Fixed placenta and fetal tissues Fresh placenta and fetal tissues (stomach contents, lung)	H Culture
<u>Toxicoses</u> Pine Needles Nitrate Nutritional deficiency (Selenium, Vitamin E)	<u>No consistent fetal or placental lesions- No tests available</u> <u>Feed, fetal ocular fluid and abomasal contents</u> <u>Fetal liver or maternal blood/serum</u>	T

* Serology is the preferred method for specific diagnosis of brucellosis.

RT-Red top tube; PT-purple top tube; VI-Virus isolation; PCR-Polymerase chain reaction; IHC-Immunohistochemistry
S-Serology; FA-fluorescence antibody test; H-Histopathology; T-Toxicology