

# Bovine Abortion Sampling Guidelines

1. **Placenta** – This tissue is really important if you can get it please! Place a piece of placenta (as clean as possible) in the labelled **universal** provided. Please include both **cotyledon and membrane**.

Gram and MZN stains, plus wet preparations to detect fungi are carried out on the placenta as part of the basic package in addition to culture.

2. **Foetal fluid**- using the pipette fill both **red top tubes** labelled foetal fluid with as much fluid as possible. Fluid from the thorax/pericardium/abdomen or unclotted blood is suitable. Foetal fluid is tested for BVD (antibody and antigen), *N. caninum* and *L. Hardjo* antibodies as part of the basic package. Foetal fluid can also be tested for Schmallenberg antibodies at an additional charge.



3. **Foetal stomach contents (FSC)** for bacteriology- using the **vacutainer needle** and remaining **red top tube** aspirate fluid from the stomach. This should be done so that the sample doesn't contain any contaminant bacteria from the environment.



4. **Lung** for bacteriology- cut a section of lung large enough to fill the labelled universal container. Any bacteria cultured in pure growth from the FSC and/ or lung are potentially significant cause of abortion. The basic package includes all routine cultures including *Salmonella* and *Campylobacter* screens which take up to 1 week to complete.



5. IBR, BVD and Schmallenberg virus can be detected from tissue by PCR. This is not included in the basic package and will be charged separately., although the charge for SBV may be waived please contact us to discuss this. A 1x1cm square of each tissue in virus transport medium is required. This can be frozen until bacteriology results are available and tested retrospectively.

SBV - brain

BVD - spleen

IBR - liver

6. In a **still born calf** dissecting out the **thyroid** and storing half in formalin and half fresh is useful if iodine deficiency is suspected. The fresh tissue can be analysed for iodine content. Fixed tissue can be examined histologically for evidence of iodine deficiency. Fresh liver can be analysed for selenium content. There is an additional charge for thyroid iodine, liver selenium and histopathology of the thyroid.



7. Where tissues are required for **histopathology**, they should be stored in 10 x the volume of formalin after collection. 1cm<sup>3</sup> tissue cubes are required.
  - **Liver** - can be useful in identifying IBR infection
  - **Lung** - histological changes are often evident in cases of bacterial abortion
  - **Heart** - useful in the diagnosis of *Neospora*
  - **Brain** - whole- essential in the diagnosis of *Neospora*
  - **Thyroid** - hyperplasia can indicate Iodine deficiency
  - **Placenta** - a placentitis can be indicative of an infectious cause of abortion

**\*Please remove sharps from the pack before posting\***

**\*Ensure all containers are labelled and tightly sealed, with adequate absorptive material. Packs must comply with packaging Instruction P650\***

**\*Please complete the submission form with as much history as possible to aid in scheduling testing and interpretation of results.\***

**SEND SAMPLES**

SRUC Veterinary Services

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Email: [vsenquiries@sruc.ac.uk](mailto:vsenquiries@sruc.ac.uk)  
[www.sruc.ac.uk](http://www.sruc.ac.uk)

Date sampled: \_\_\_\_\_ Vet Practice: \_\_\_\_\_  
 Client: \_\_\_\_\_ Clinician: \_\_\_\_\_  
 Farm: \_\_\_\_\_  
 Postcode: \_\_\_\_\_ Crofter Y/N\*  
 CPH: \_\_\_/\_\_\_/\_\_\_\_ Health Scheme Member Y/N\*

SRUC Ref:
Date:
Suites:
Duty Vet:

**Bovine Abortion**

Beef/Dairy\* Breed of dam:..... Breed of sire:..... AI/Natural service\*

Number of abortions:..... Time period:..... Homebred/Purchased replacements\*

Stage of gestation:..... Assisted calving Y/N\*

Calving started:..... Herd size:..... Group size:.....

Vaccinations (please circle) BVD Leptospirosis IBR Other.....

Housed/Outside\* Feeding:.....

Dam body condition, clinical signs?.....

Comments; Please note problems with infertility/re-absorptions/high barren rate

\*Delete as applicable

Dam ID:..... Number of foetuses:..... Number of placentas:.....

Any gross pathology seen? E.g. arthrogyposis, placentitis, skin lesions .....

**Basic Abortion Package**

Sample	Test	No. of samples
FF	BVD ab/ag, <i>L. Hardjo</i> serology, <i>N. caninum</i> serology	
FSC	Bacteriology / microscopy	
Placenta	Bacteriology / microscopy	
Lung	Bacteriology	

**Histopathology**

Please circle tissues fixed:

Brain / Thyroid / Liver / Lung / Heart / Placenta

Maternal serology from dam (additional charge)

Please circle tests required:

- *L. Hardjo*, BVD, *N. caninum*
- *L. Hardjo*, BVD, *N. caninum*, IBR
- *L. Hardjo*, BVD, *N. caninum*, IBR, SBV

**Additional testing charged separately.**

Sample	Test	No. of samples
Liver	IBR PCR	
FF	SBV serology	
Brain	SBV PCR (unless indicated)	
Spleen	BVD PCR	

Is the dam IBR marker vaccinated? Y/N\*

**Additional testing charged separately.**

Sample	Test	No. of samples
Thyroid	Iodine	
Liver	Selenium	



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