Ovine Abortion Sampling Guidelines

Use one abortion kit and submission form per ewe.

Each kit contains consumables to allow sampling of a single or set of twins

**Samples per foetus required for core testing**

**Placenta** – Place a piece of placenta (as clean as possible) in the labelled universal provided. Please include a cotyledon and surrounding membrane in the sample. Placenta is essential to make a diagnosis of EAE. An MZN stain is used to detect elementary bodies. Gram smears and cultures are also carried out as part of the basic package.

**Foetal fluid** – From each foetus, fill two labelled tubes with as much fluid as possible (see Image 1). Fluid from the thorax/pericardium/abdomen or unclotted blood is suitable. Foetal fluid is tested for Toxoplasma antibodies as part of the basic package.

**Foetal stomach contents (FSC)** – Using the vacutainer needle and labelled red top tube aspirate fluid from the stomach of each foetus (see Image 2). FSC is used for bacteriology so caution should be taken to minimise contamination of the sample with bacteria from the environment. Any bacteria cultured in pure growth from the FSC are a potentially significant cause of abortion. The basic package includes all routine cultures including Salmonella, Campylobacter and Brucella screens which take up to 1 week to complete.

**Additional Testing**

**Border Disease virus or Schmallenberg virus** – BDV can be detected in spleen or foetal fluid by PCR; SBV can be detected from umbilical tissue or hair-coat fluid by PCR. A 1cm³ of tissue in virus transport medium or a separate aliquot of foetal / hair-coat fluid is required. These can be frozen until bacteriology results are available and tested retrospectively.

**Border Disease virus or Schmallenberg virus antibody** – Foetal fluid can be screening for presence of both BDV and SBV antibodies.

**Tissues for Histopathology** – Tissues should be stored in 10 times the volume of formalin after collection. 2cm tissue cubes are required (except brain). The following tissues are recommended: Thyroid, Lung, Heart, Liver, Brain (whole) and Placenta.

**Maternal Serology** – Blood taken from the aborting ewe can be screening for antibodies to EAE, Toxoplasma, Border Disease and Schmallenberg virus. It can also be used for Border Disease PCR where acute infection is suspected.

**Sending Samples**

Send kit and completed submission form to: SRUC Veterinary and Analytical Laboratory, Pentlands Science Park, Bush Loan, Penicuik, Midlothian, EH26 0PZ.

Please remove sharps from the pack before posting and ensure all containers are labelled and identified, where appropriate, as Foetus 1 and Foetus 2.
Ensure all containers are tightly sealed, with adequate absorptive material.
Packs must comply with Packaging Instruction P650; for more information go to: tinyurl.com/1s6futj1
## Ovine Abortion Submission Form

### Dam Information
- **Dam ID:**
- **Age of Dam:**
- **Breed of Dam:**
- **Breed of Sire:**
- **Date due to lamb:**
- **Group Size:**

### Dam body condition & clinical signs:

### Flock Management Information
- **Flock Size:**
- **Upland or Lowland:**
- **Feeding:**
- **Housed or Outside:**
- **Source of Replacements:**
- **Vaccinations:**
  - Toxoplasma □
  - EAE □
  - Other (give details):

### Abortion Outbreak Information
- **No. of abortions:**
- **Time period of abortions:**
- **Abortions in previous years?**
  - Yes □
  - No □
- **Details / Diagnosis:**
  - Gross pathology in abortion material (placentitis, arthrogryposis, etc:

### Core Testing (included in price)

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Testing Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foetal stomach contents</td>
<td>Toxo iFAT</td>
</tr>
<tr>
<td>Stomach swab* (if no FSC available)</td>
<td>EAE MZN smear</td>
</tr>
<tr>
<td>Foetal fluid</td>
<td>Culture / Microscopy</td>
</tr>
<tr>
<td>Placenta</td>
<td></td>
</tr>
</tbody>
</table>

*swab not supplied in kit

### Additional Testing (Tick if required)

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>SBV Ab (SBVI)</th>
<th>SBV PCR (SBVPC)</th>
<th>Border disease PCR (BDMOR)</th>
<th>Border disease Ab (BorDis)</th>
<th>Histopath (HISTO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foetal fluid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spleen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Umbilicus / Fleece scrape</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tissues for histopathology*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*see sampling guide for tissues required

### Other samples collected

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Testing Required</th>
</tr>
</thead>
</table>
| Maternal Serology – tick testing required
- **Ewe ID**  | **EAE Ab** | **Toxo Ab** | **BD Ab** | **BD PCR ** | **SBV Ab** |
- **** a separate red top tube is required for this test