



# Ewe abortion and newborn lamb death surveillance program: Sampling guide

14 June 2022

This surveillance program involves sheep producers collecting targeted samples from aborted or dead newborn lambs as the losses occur. Producers are asked to collect the samples as they find the dead or aborted lambs and then freeze the samples until they have sampled at least three different aborted or newborn lambs.

Producers submit the frozen samples through their preferred private or Department of Primary Industries and Regional Development (DPIRD) veterinarian to the DPIRD Diagnostics and Laboratory Services, where they are tested for a range of infectious diseases. Producers may also access the free testing program through their sheep consultant.

If the testing identifies an infectious disease is causing the losses, producers may be able to implement management strategies to reduce future impact. The test results will also be used to support WA's sheep export markets by demonstrating that exotic causes of sheep abortion that are of concern to trading partners do not occur in WA.

To ensure samples are representative of flock-wide problems, we ask that the samples are collected and frozen when they are found, but are not submitted until three or more samples have been taken from different cases. Only cases where the lamb has not walked (gel still present on the hooves) are suitable for this targeted surveillance.

## Diseases to be tested for include:

### Common or endemic infectious causes of ewe abortion tested for:

- Border disease
- Campylobacteriosis (previously known as vibriosis)
- Leptospirosis
- Listeriosis
- Q fever
- Salmonellosis
- Toxoplasmosis

### Important exotic and reportable causes of ewe abortion will be tested for:

- *Brucella melitensis*
- *Chlamydophila abortus* (enzootic abortion)
- *Salmonella abortus*

## Sampling kit contains:

- One esky
- One submission form and a sampling guide
- Three sample jars, labelled one to three
- Three pairs of gloves
- Two ziplock bags (one for the lab submission form and one for the samples)

## Appropriate samples are either:

1. Cotyledons (buttons) from the placenta of aborted lambs (please collect cotyledons whenever they are available to allow a full set of tests to be run) or
2. Liver from aborted or stillborn lambs, or weak lambs that died before walking

## Sampling method:

- **Gloves must be worn when sampling, as some of the diseases causing sheep abortions are zoonoses, capable of causing human illness. Pregnant women should take particular precautions if they undertake sampling.**
- Hands and equipment should be washed with soap or detergent after sampling.
- From each eligible lamb, collect a 50-gram sample of liver and/or a cotyledon (button) from the placenta (after birth). **Refer to the photos on the next page.**
- Keep the sample as clean as possible and avoid contamination with soil or faeces.
- Place the samples in a sample jar and freeze - one jar per lamb.
- Record the sample jar number (1 to 3) on the submission form.
- On the submission form, indicate the 'syndrome' as either 'Abortion', 'Stillbirth' or 'Weak and dying lambs' depending on your observations.
- Record the number of cases of each syndrome you have observed in the table.
- Freeze the samples before sending, and store frozen while collecting further samples.
- Fill out the submission form and place it in a sealed ziplock bag by itself; the samples should be sealed in the second ziplock bag.

When three sets of samples are ready to be sent, contact either your nominated professional (vet or consultant) or local DPIRD veterinary officer to have the samples correctly submitted. Samples should be sent Monday to Wednesday to avoid weekend delays in delivery to DPIRD.

**For more information about sample collection and submission, contact your local DPIRD field veterinary officer or Dr Courtenay Bombara, program co-ordinator, on +61 (0)8 9780 6185.**



Figure 1 – A neonatal lamb carcass with liver exposed in situ



Figure 2 – Liver removed from lamb carcass and ready to collect a sample



Figure 3 – Liver sample in collection jar ready to label and freeze

### **Important disclaimer**

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