The Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) offers timely and accurate diagnostic tests for Tritrichomonas foetus, the parasite that causes bovine trichomoniasis, or trich. Trich causes abortions and infertility, and unless properly identified with diagnostic testing, can cost the state's cattle producers millions.

TVMDL employs the most current technology available utilizing real-time polymerase chain reaction (rtPCR) testing. In order to provide the best service to clients, here are some important guidelines to keep in mind for shipping, incubating, and pooling samples for trich testing by rtPCR or culture.

**COLLECTING AND HANDLING SAMPLES**
As with all diagnostic tests, strict attention to detail in collecting and handling samples helps to ensure an accurate diagnosis:

- If requesting a test that uses a collection pouch, ensure it is not expired.
- Because the rtPCR test is based on molecular biology, strict attention to avoid cross contamination between samples should begin at collection. All samples should be collected in as clean a manner as possible. Avoid allowing blood and fecal matter into the collection pouch.
- Protecting the sample from extreme weather or exposure to sunlight while at chute side is important. Minimize temperature extremes in shipment by adding a cold pack in hot weather. Protect the sample from direct contact with the cold pack.

For step-by-step instructions on how to collect a sample and package it for shipment, visit the bovine section of the Education Library at tvmdl.tamu.edu for a video.

**COLLECTION AND SHIPPING GUIDELINES BASED ON REQUESTED TEST**
- **In-Pouch (rtPCR)**
  - Ship in In-Pouch
  - Incubate samples at 37°C (98.6°F) for 48 hours prior to testing
  - Samples must arrive at laboratory within 96 hours of collection

- **Culture**
  - Ship in In-Pouch
  - Samples must arrive at laboratory within 48 hours of collection

- **Direct Smegma (rtPCR)**
  - Ship in test tube with 1.5 mL of phosphate buffered saline (PBS)
  - Samples must arrive at laboratory within 96 hours of collection
  - Samples must be chilled from collection until received at laboratory

**POOLING SAMPLES TO REDUCE COSTS**
In-Pouch (rtPCR) samples are eligible for pooled testing for a more cost effective rate. Per the Texas Animal Health Commission's (TAHC) regulatory testing requirements, up to five samples can be pooled at one time. Samples must be collected and shipped individually to the laboratory. If requested, TVMDL will pool up to five samples at the laboratory for $1 per pouch.
Pricing example: 5 samples submitted and pooling requested would be charged $25 testing fee + $5 pooling for a total of $30 plus accession fee.

If a pooled sample results in a positive test, TVMDL will identify the positive animal(s) by testing all individual samples from the pool at the regular price of $25 per test. Without the individual tests, all bulls in a positive pool are required by the State to go to slaughter.

**HISTORY OF TRICHOMONIASIS IN TEXAS**

In 2008, the Texas beef cattle industry responded to the economic threat posed by bovine trichomoniasis. The industry asked the Texas Animal Health Commission (TAHC) to consider launching a trichomoniasis control program. In response, TAHC organized the trichomoniasis working group, which includes representatives from livestock commodity groups, the Texas A&M AgriLife Extension Service, the Texas A&M University College of Veterinary Medicine and Biomedical Sciences, the Texas Veterinary Medical Association and TVMDL.

Although, the program emphasizes PCR testing as the preferred methodology, culture of the organism is another option. Selected by the State and TAHC as the primary testing facilities, TVMDL’s full-service laboratories offer both testing options.

Enter the owner’s email on the submission form so they receive reports along with the submitting veterinarian.

Indicate if the sample was incubated prior to shipping. If incubated, list the amount of time.