The Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) has been providing drug testing services for livestock shows across the country for more than 30 years. The agency tests in excess of 3,500 samples for more than 90 shows across the United States annually. TVMDL’s drug testing laboratory is an ISO 17025 accredited lab with state-of-the-art equipment and expert staff. The information below is an overview of TVMDL’s livestock show drug testing program.

**Chain of Custody**

It is imperative that chain of custody is maintained from the time of sample collection to receipt of the sample at the lab. TVMDL has a submittal form specifically for livestock shows to maintain chain of custody. The form can be found on the TVMDL website on the “Find a Form” tab located on the main menu. A list of animal ID numbers and species should be attached to the submittal form. Do not include exhibitor names on sample containers or paperwork. Additionally, sample collection containers should be sealed with evidence tape placed across the top of the lid. Containers should be labeled with the animal ID and species, ensuring the information is legible and not covered by the evidence tape.

**Testing Information**

TVMDL can provide drug testing on a variety of show animal species, including cattle, sheep, goats, pigs, rabbits, poultry, horses, llamas, and alpacas.

**Sample Matrices**

TVMDL can provide drug testing on a variety of sample matrices. Refer to the table below for information regarding species and minimum volume required.

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Species</th>
<th>Minimum Amount</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urine</td>
<td>*All</td>
<td>10 cc</td>
<td>*Includes rabbits, not poultry</td>
</tr>
<tr>
<td>Serum/Plasma</td>
<td>*All</td>
<td>3 cc</td>
<td>*Not rabbits or poultry</td>
</tr>
<tr>
<td>Feces</td>
<td>Poultry, Rabbits</td>
<td>2 g</td>
<td></td>
</tr>
<tr>
<td>Hair</td>
<td>Bovine, Caprine, Ovine, Equine</td>
<td>2 cm diameter (bunched)</td>
<td></td>
</tr>
<tr>
<td>Feathers</td>
<td>Poultry</td>
<td>15 feathers</td>
<td></td>
</tr>
</tbody>
</table>

TVMDL also has the ability to test tissue samples, including retina, liver, kidney and muscle. Please contact the laboratory directly with specimen requirements for tissue testing.
Drug Screening
All samples are screened using liquid chromatography – mass spectrometry (LC/MS). TVMDL's comprehensive drug screen includes a variety of drug classes, such as nonsteroidal anti-inflammatory drugs, steroids, beta-adrenergic agonists, illicit drugs, stimulants, diuretics, and sedatives/tranquilizers.

Confirmation Testing
Samples determined to be suspect as a result of the screening process are subjected to a second, confirmatory test at no additional fee. Confirmation testing is performed using liquid chromatography – tandem mass spectrometry (LC-MS/MS).

Test results are reported qualitatively (e.g., presence or absence). Quantitative testing is available for confirmed positive samples for an additional fee.

Information pertaining to test fees and turnaround times can be found on our website at https://tvmdl.tamu.edu/.

Sample Collection Supplies
TVMDL offers a variety of sample collection supplies for livestock show testing. Visit the TVMDL website and hover over the “Deliver a Sample” tab and click on the “Order Supplies” option. Supplies should be ordered approximately 4 weeks in advance of the show to avoid delays.

Shipping Information

Sample Handling
Urine samples should be individually double-bagged using zip-lock bags. Samples should be shipped overnight with cold packs. Samples can be stored refrigerated or frozen prior to shipping.

Sample Shipping
TVMDL recommends using either FedEx or UPS priority overnight for shipping samples to the lab.