

FAQ: Sending Samples for Molecular Diagnostics

Hundreds of samples arrive daily at the Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) for testing. Testing accuracy often depends on submission of the proper specimen for the assay, particularly for molecular diagnostics.

To ensure the appropriate sample is submitted for molecular diagnostics at TVMDL, please consult the website for specific details associated with the desired test (click “details” next to the test description). The information below is general and is not a substitute for test specific information; this is very important in regards to avian Influenza and Trichomonas testing. If additional questions arise, please do not hesitate to contact TVMDL and speak with one of our professional staff.

BLOOD:

For most species, the blood specimen type for the PCR test is EDTA whole (unclotted) blood (e.g purple top tube). Heparinized blood (e.g. green top tube) is not recommended since heparin may inhibit PCR. (However, heparinized whole blood is acceptable for some avian testing, as indicated.)

SWABS:

Swabs submitted in gel media or Ames media cannot be used for PCR due to the inhibitory effects of the media. The preferred type of swab is a Dacron or polyester swab with a plastic handle. A bacterial culture swab may be used, however do not place the swab in the bacterial media. Swab(s) should be submitted in a sterile container such as a red top tube (with a drop or two of sterile saline).

TISSUE:

Fresh tissue is preferred. Autolyzed tissues are not recommended (tissue degradation causes an increase in the presence of inhibitors as well as degradation of target nucleic acid).

FECES:

Fecal samples should be submitted in leak-proof containers. There is a greater chance of cross contamination when samples leak or are packaged inappropriately.

SERUM:

Serum samples are not used for most PCR testing at TVMDL. Please verify with the TVMDL website or call the laboratory to confirm sample types prior to collection or shipping.

GENERAL:

Samples for PCR testing should be submitted appropriately packaged as per suggestions on our website (tvmdl.tamu.edu), and sent with an ice pack (with the exception of Trich pouches, no ice pack). Preferably, samples should be overnighted to the laboratory.

