

# Top 10 Tips for Sample Submission Success

We've asked each of our laboratory disciplines for their most important piece of advice for ensuring your take the best quality sample. Here's what they had to say....

- 1: Bacteriology** – Provide all relevant information about the site from which the sample(s) are taken, and clinical details including any recent treatments. This aids us in undertaking the most appropriate testing, understanding the pathology being seen, as well as the relevance of any microbial findings and what treatment options should be assessed.
- 2: Biochemistry** – Remember to fill your tubes to the line. The coagulants, and anti-coagulants, are sensitive additives that need to be present in specific ratios. If you underfill or over fill your tube some tests may be invalidated, for example coagulation studies, which means resampling for accurate results.
- 3: Cytology** – Provide all relevant information about the site you have aspirated and preferably the clinical presentation. The site is vital to the interpretation of cytology samples as we have no architecture to help us orient ourselves and different areas contain different populations as 'normal,' eg finding epithelial cells in a spleen aspirate vs a mammary gland aspirate.
- 4: Haematology** – Samples are best examined fresh, so the fresher the sample is sent the better. If you can't send the sample that day we suggest trying your hand at making a blood smear – this will allow us to review the morphology of the cells before they've started to haemolyse.
- 5: Histopathology** - Clinical data is very helpful for a proper evaluation of the specimen. To obtain a proper fixation, the ratio between the volumes of formalin to the volume/size of the sampled tissue should be at least 8:1. This will help avoid the presence of artefacts in the histologic slides and possible issues in any further testing (e.g. immunohistochemistry).
- 6: Molecular (PCR)** - Molecular techniques are highly sensitive, but results can only be as good as the sample taken. Use of an appropriate swab in the correct transport medium will help ensure there is the maximum chance of detecting any virus or bacteria.
- 7: Parasitology** – Many faecal pathogens are shed into the intestinal tract intermittently, so a single negative result from one sample may not be truly reflect infection status. Three samples (which may be pooled), from three consecutive days will offer a greater success at detecting pathogens in an infected patient.
- 8: Serology** – Remember to include some details of the last previous sample submitted from an animal otherwise results could be delayed especially if the animal's name, owner and/ or veterinary practice have changed since the last submission. It is also important to spell the animals name correctly and clearly.
- 9: Virus Isolation** - Quality and quantity of sample are important. Cotton bud type swabs don't hold as much Virus or sample the correct part of the respiratory tract as our purpose made nasopharyngeal swabs. We need 30mls of heparin blood to be able to get enough white blood cells for isolation techniques.
- 10. FREE Sample Kits!** We are happy to supply you with a comprehensive selection of swabs / pots and transport medium. These are supplied free of charge when you are submitting your sample for testing to us, or there is a price for any supplies you request which are being sent elsewhere.

\*Why not keep a few in stock ready for when needed!\*

Downloadable forms for submission, supplies and pre-paid postage labels can be found on our web site at: [http://www.aht.org.uk/cms-display/diag\\_submission.html](http://www.aht.org.uk/cms-display/diag_submission.html)

If you are unsure about taking the best quality sample or would like advice on which tests to consider, do not hesitate to contact us by calling 01638 552993 or e-mailing [diagnostics@aht.org.uk](mailto:diagnostics@aht.org.uk) as we are always happy to assist and advise.