

Thank you for your interest in the NGS Mystery Canine Respiratory Disease (MDL-0202) test at KSVDL. Next generation sequencing (NGS) is being utilized as an exploratory/surveillance test to complement efforts towards the discovery of a possible NEW causative agent associated with the current mystery canine respiratory disease. NGS should not replace baseline respiratory diagnostics, but it is only appropriate as an ancillary test after common pathogens have been ruled out by more common PCR and/or cultures. Please follow the Link for KSVDL's canine respiratory disease diagnostic test strategy recommendations.

If you are presented with a canine respiratory patient, KSVDL recommends the best diagnostic plan is to first rule out common pathogens. Our Canine Respiratory PCR Panel (MDL-3400) targets all common pathogens (1-2 day turnaround time).

In addition to our common pathogen panel please select NGS Mystery Canine Respiratory Disease (MDL-0202) test (2-4 week turnaround time). MDL-0202 is being utilized by KSVDL as a surveillance test to identify the entirety of the microbial population present in submitted samples to help evaluate pathogens of clinical significance.

It is important to highlight that the analysis and interpretation of NGS data is a complex task. The microbes identified by NGS under this test cannot be interpreted as causative, but we are hopeful the results will help veterinary researchers and clinicians identify yet unrecognized associated pathogens with this unusual disease.

The respiratory panel (MDL-3400) will be charged at the normal price. NGS (MDL-0202) will be offered free of charge.

Acceptable samples for both MDL-3400 and MDL-0202 include:

Plastic-shafted, synthetic (non-cotton) swabs submitted in LIQUID transport media or 0.25 ml of sterile saline in a sterile preservative-free tube. (e.g., Copan ESwab)

5 gm fresh lung tissue

It is recommended to send us more than one swab, but we understand this may not be possible.

Please ship the swabs on a cold pack. You can order a discounted shipping labels from our website <u>Kansas State Veterinary Diagnostic Laboratory (ksvdl.org)</u> and scroll down to find six purple boxes, clicking on the box that states Create UPS Label.

Please utilize the <u>Canine Submission Form</u> on our website. If you would like your canine respiratory case to be included in our surveillance testing, please write in the test code MDL-0202 on the line "Other tests not listed" on the second page. Again, the turnaround time is estimated at 2-4 weeks for this test and 1-2 days for the Canine Full Respiratory Panel (MDL-3400); we anticipate this could become longer depending on the volume of samples that will be submitted for testing.

The MDL-0202 report from KSVDL identifies the organism(s) found in the sample.

These may or may not be the causative organism(s) associated with this case.

Please reach out to <u>CLIENTCARE@VET.K-STATE.EDU</u> or call 785-532-5650 if you further questions about the recommended testing.