

CANINE DIAGNOSTIC PLANS/PANELS



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The following diagnostic plans have been developed primarily as an **educational** tool to assist the veterinarian in designing a complete, although not exhaustive, diagnostic strategy. To encourage veterinarians to select only the tests that are deemed clinically appropriate in each situation, the price of the diagnostic plan is not discounted from the sum of the individual test costs. Superscript numbers match the individual tests to the sample needed. It is assumed in the majority of the diagnostic plans that **baseline tests such as an automated CBC, chemistry panel and urinalysis may have already been performed and therefore are not included.** For the test groupings labeled as panels, there may be a discounted price versus the costs of the individual tests. Diagnostic plans and panels can be requested by writing the complete name as the test request. If appropriate samples are included all tests will be

DIAGNOSTIC PLAN/PANEL	TESTS PERFORMED	PRICES	SAMPLES NEEDED
<i>Canine Abortion/Fading Puppy Tissue Diagnostic Plan</i>	<p>(3) Aerobic bacterial cultures¹ (1 sensitivity included); Canine Brucella culture^{†2}; Canine Herpes Virus FA³; Canine Parvovirus-2 FA⁴; Histopathology⁵;</p> <p>(2) Leptospira FAS⁶; Toxoplasma FA⁷; Virus isolation⁸</p> <p>[†]Culture may detect Brucella canis but serologic testing of bitch is a superior test method. See Canine Abortion/Fading Puppy Serology Diagnostic Plan below.</p>	\$383.50 per puppy	<p>Fresh tissue^{1,2,3,4,6,7,8}: lung, placenta, stomach contents, kidney, liver, heart, adrenal, skin, heart blood in sterile red top tube AND Formalin fixed⁵: placenta, liver, lung, brain, adrenal, heart, thymus, small intestine, kidney, fetal skin. SHIP FRESH TISSUE CHILLED AND PROTECT FIXED TISSUE FROM FREEZING. Kit is available. See Field Necropsy Kit for more instructions and details on sampling procedure and technique. If full necropsy desired see Necropsy, Non-Contract cases.</p>
<i>Canine Abortion/Fading Puppy Serology Diagnostic Plan</i>	<p>Canine Brucella Slide Agglutination/AGID II; Canine Herpesvirus SN; Leptospira MAT, 5 standard serovars; Neospora IFA; Toxoplasma gondii MAT; T4; Free-T4 (two step); TSH</p> <p>In unvaccinated animals may also want to consider Canine Adenovirus SN (\$16.50), Canine Distemper Virus SN (\$16.50), and Canine Parvovirus HI (\$16.50). Additional test costs would apply.</p>	<p>\$138.50 single</p> <p>\$233.00 paired (1 thyroid panel)</p>	<p>Maternal serum (separated). SHIP CHILLED.</p> <p>When acute and convalescent samples are/will be collected, for most serology assays they should always be tested in parallel, and paired results interpreted. If acute samples are submitted alone, all tests will be performed. If second, convalescent samples are later submitted, tests on both samples will be run in parallel and fees for both samples will be charged. To avoid testing acute samples twice, hold and submit with convalescent samples. If convalescent samples will not be collected, or when infectious abortion is strongly suspected due to history, immediate testing of acute sample may be warranted.</p>

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Canine Diarrhea Diagnostic Plan

[Anaerobic bacterial culture](#)¹; [Campylobacter jejuni culture](#)²; [Canine Parvovirus ELISA](#)³; [Clostridium difficile toxins \(A/B\)](#)⁴; [Cryptosporidium ELISA](#)⁵; [Fecal qualitative exam](#)⁶; [Giardia ELISA](#)⁷; [Salmonella culture](#)⁸ (1 sensitivity included); [Virus isolation](#)⁹

[[Canine Coronavirus FA](#)¹⁰; [Canine Parvovirus-2 FA](#)¹¹; [Histopathology](#)¹² can be added if necropsy samples are included]

In puppies less than 10 days of age an [Aerobic bacterial culture](#) (\$35) on **feces** or **intestinal contents** should also be considered.

\$270.50
(ante mortem samples)

\$398.50
(full set of necropsy samples)

Ante mortem samples: **Fresh feces**^{2,3,5,6,7,8,9} in leak-proof container (20 g), **fresh feces**⁴ (5 g) (frozen), **fecal swab**^{2,8} placed in aerobic transport media (Amies with charcoal), **fecal swab**¹ placed in anaerobic transport media (BBL™ Port-a-cul™). One **fecal sample**⁸ (1 g, fill to line on container but do not overfill) can be put in ParaPak® transport media to assist with Salmonella recovery (call shipping 607.253.3935 to order these). **SHIP CHILLED AND KEEP FROZEN SAMPLES FROZEN EXCEPT FOR PARAPAK® AND PORT-A-CUL™ WHICH SHOULD BE KEPT AT ROOM TEMPERATURE.**

Necropsy samples: **Tied off loop of bowel with contents**^{1,2,3,4,8,9,10,11} (frozen), **+/- intestinal swab**^{1,2,8} placed in anaerobic transport media (BBL™ Port-a-cul™), **tied off loop of bowel with contents**^{2,3,8,9,10,11} (fresh), **fresh feces**^{2,3,5,6,7,8,9} placed in leak-proof container (20 g), **full set of tissues**¹² placed in formalin including multiple sections of intestinal tract. **SHIP CHILLED AND KEEP FROZEN SAMPLES FROZEN EXCEPT FOR PORT-A-CUL™ WHICH SHOULD BE KEPT AT ROOM TEMPERATURE. PROTECT FIXED TISSUE FROM FREEZING.**

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<p>Canine Infectious Respiratory Diagnostic Plan</p>	<p>Aerobic bacterial culture¹ (1 sensitivity included); Canine Distemper FA²; Canine Parainfluenza FA³; Cytology⁴; Fungal culture⁵; Fungal serology panel⁶; Histopathology⁷; Influenza virus matrix PCR⁸; Mycoplasma culture⁹; Virus isolation¹⁰</p>	<p>\$334.25 (ante mortem samples)</p> <p>\$328.50 (full set of necropsy samples)</p>	<p>Ante mortem samples: transtracheal wash (TTW) (preferred sample) or bronchial alveolar lavage (BAL) fluid in RTT^{1,2,3,5,8,9,10}, EDTA tube⁴ (LTT) and (2) air dried slides⁴ of fluid, (1) swab inoculated with sample^{1,9} placed in aerobic transport media (Amies w/o charcoal) and serum⁶ (separated) SHIP CHILLED EXCEPT FOR SLIDES WHICH SHOULD BE AT ROOM TEMPERATURE.</p>
	<p>Testing for evidence of lungworms, qualitative fecal (\$25.00) and an Occult Heartworm (\$16.50) may also be indicated. Please request separately and submit fresh feces in leak-proof container (10 g) and 1 mL serum (separated). SHIP CHILLED.</p>		<p>It may be helpful to collect and bank a serum sample for possible acute and convalescent serology. [Nasal or pharyngeal swabs^{8,10} are only appropriate for virus isolation and PCR. Submit in viral transport media or a RTT with a 0.5 ml sterile saline for virus isolation and PCR. SHIP CHILLED]</p> <p>Necropsy Samples: Section of fresh lung^{1,2,3,5,8,9,10} +/- (1) swab inoculated with sample^{1,9} and placed in aerobic transport media (Amies w/o charcoal) and full set of tissues⁷ placed in formalin. SHIP FRESH TISSUE AND SWAB CHILLED AND PROTECT FIXED TISSUE FROM FREEZING.</p>
<p>Canine Liver Function/Porto-systemic Shunt Panel</p>	<p>Bile acids (fasting panel)¹; Bile acids (post-prandial panel)²; Protein C³; Small animal chemistry⁴</p>	<p>\$114.50</p>	<p>2 mL serum^{1,2,4} (separated), citrate plasma³ in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.</p> <p>Pre-prandial bile acid sampling should be done before the animal is fed at their routine meal time (e.g. morning), and the post-prandial sample drawn 2 hours later. If only one sample can be collected, the post-prandial sample is preferred.</p>

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<p><u>Canine Neurologic Tissue Diagnostic Plan</u></p> <p>PLEASE STRONGLY CONSIDER RABIES TESTING AT YOUR STATE HEALTH DEPARTMENT</p>	<p>Aerobic bacterial culture¹; Canine Distemper Virus FA²; Fungal culture³; Histopathology⁴; Neospora IFA⁵; Toxic heavy metal screen⁶; Toxoplasma gondii MAT⁷; Virus isolation⁸; (2) West Nile Virus IgM⁹; West Nile Virus PCR¹⁰</p> <p>May also want to consider CSF Analysis (Cytology-fluid)(\$52).</p>	<p>\$404.75</p>	<p>CSF^{1,3,5,8,9,10} sample taken using sterile technique and placed in sterile red top tube +/- (1) swab^{1,3} inoculated with CSF and placed in aerobic transport media (Amies with charcoal), fresh brain^{1,2,3,8,9} placed in sterile container, serum^{5,7,9} (separated) or heart blood in red top tube, fresh liver⁶ in sterile container, full set of fixed tissues⁴ placed in formalin, including multiple sections of brain and spinal cord. SHIP CHILLED AND PROTECT FIXED TISSUE FROM FREEZING. PLEASE INDICATE IF RABIES TESTING IS PENDING. See Tissues for Rabies Diagnosis for photos of brain samples needed for rabies testing.</p>
<p><u>Canine Vaccine Panel 1</u></p>	<p>Canine Distemper SN; Canine Parvovirus (CPV-2) HI</p>	<p>\$33.00</p>	<p>2 ml serum (separated). SHIP CHILLED.</p>
<p><u>Canine Vaccine Panel 2</u></p>	<p>Canine Distemper SN; Canine Parvovirus (CPV-2) HI; Canine Adenovirus-1 (Infectious Canine Hepatitis) SN</p>	<p>\$49.50</p>	<p>3 ml serum (separated). SHIP CHILLED.</p>
<p><u>Canine Vaccine Panel 3</u></p>	<p>Canine Distemper SN; Canine Parvovirus (CPV-2) HI; Canine Coronavirus SN</p>	<p>\$49.50</p>	<p>3 ml serum (separated). SHIP CHILLED.</p>
<p><u>Coagulation Panel + Fibrinogen</u></p>	<p>aPTT; Fibrinogen (Clauss method); PT; TCT</p>	<p>\$32.50</p>	<p>2 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.</p>
<p><u>Coagulation Panel, Small Animals</u></p>	<p>aPTT; PT; TCT</p>	<p>\$26.00</p>	<p>2 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.</p>

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Cornell Canine Liver Panel	Bile acids (fasting panel) ¹ ; Bile acids (post-prandial panel) ² ; Coagulation Panel + Fibrinogen ³ [aPTT ; PT ; TCT ; Fibrinogen (Claus method)]; Hemogram, routine (CBC) ⁴ ; Protein C ⁵ ; Small animal chemistry ⁶	\$183.25	EDTA whole blood ⁴ (LTT), (2) air dried blood smears ⁴ , serum ^{1,2,6} (separated), citrate plasma ^{3,5} in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED. Pre-prandial bile acid sampling should be done before the animal is fed at their routine meal time (e.g. morning), and the post-prandial sample drawn 2 hours later. If only one sample can be collected, the post-prandial sample is preferred.
DIC Panel, Small Animal	aPTT ; PT ; Fibrinogen (Claus method) ; Antithrombin ; D-dimer	\$86.50	2 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.
Dermatology Diagnostic Plan	Aerobic bacterial culture ¹ (1 sensitivity included); Biopsy for parasite exam ² ;	Deep lesion: \$257.00	Deep lesion: (2) fresh skin biopsies ^{1,2,4,5} in plain RTT with 0.5 ml sterile saline to keep moist (not wet) +/- swab ^{1,4} from deep in tissue placed in aerobic transport media (Amies with charcoal), multiple formalin fixed skin biopsies ⁶ , serum ^{3,7} (separated). SHIP CHILLED AND PROTECT FIXED TISSUE FROM FREEZING.
Deep lesion	Dexamethasone Suppression, Cortisols: 3 ³ ; Fungal culture ⁴ ; Gram stain ⁵ ; Histopathology (biopsy) ⁶ ; Thyroid Panel, Canine ⁷ : [FT4(Two Step) , T4 , T3 , TSH , TgA]		
Superficial lesion	Dexamethasone Suppression, Cortisols: 3 ³ ; Fungal culture ⁴ ; Gram stain ⁵ ; Histopathology (biopsy) ⁶ ; Thyroid Panel, Canine ⁷ : [FT4(Two Step) , T4 , T3 , TSH , TgA]; Skin scraping for ectoparasites identification ⁸ ; Cytology ⁹	Superficial lesion: \$236.75	Superficial lesion: (1) hair and skin scraping ^{4,5} for fungal culture and gram stain sent in a sealable paper envelope, (1) skin scraping ⁸ for ectoparasite identification in an escape proof, non-porous container, (2) impression smears/skin scrapings/fluid aspirates ⁹ for cytology placed on glass slides and air dried, and multiple formalin fixed skin biopsies ⁶ , serum ^{3,7} (separated). No aerobic culture is included in the superficial plan. SHIP AT ROOM TEMPERATURE AND PROTECT FROM TEMPERATURE EXTREMES. For additional information on endocrinology testing options see Canine Adrenal Function Tests .

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<i>Fever of Unknown Origin Diagnostic Plan</i>	(3) Blood culture, aerobic/fungal ¹ (1 sensitivity included); (3) Blood culture, anaerobic ² ; Fibrinogen (heat-precipitated) ³ ; Hemogram, routine (CBC) ⁴ (examination for blood parasites included); (2) Virus Isolations ⁵ (nasal, whole blood) If case is chronic, virus isolation can be omitted if desired, see comment to right.	\$275.50 Chronic case with no virus isolation \$220.25	(3) inoculated aerobic/fungal blood culture bottles ¹ , (3) inoculated anaerobic blood culture bottles ² , nasal swab ⁵ in 0.5 ml saline to keep moist (not wet). (2) tubes EDTA whole blood ^{3,4,5} (LTT), and (2) air dried blood smears ⁴ . SHIP CHILLED EXCEPT FOR SLIDES AND BLOOD CULTURE BOTTLES, WHICH ARE SHIPPED AT ROOM TEMPERATURE. See Blood Culture Technique for more information. It may be helpful to collect and bank a serum sample for possible acute and convalescent serology. This diagnostic plan is designed to detect a broad spectrum of systemic bacterial, viral, and some blood parasite causes of acute fever of unknown origin, as well as certain inflammatory changes which may assist in determining the underlying problems. Viral causes of illness are best detected acutely and most are unlikely to be detected in a patient with a chronic fever of unknown origin. This plan is intended to be used as an adjunct to targeted, disease-specific testing appropriate to the species, clinical history and geographic location or conditions. See url for other ideas of testing.
<i>Fungal Serology Panel</i>	Aspergillus antibody ¹ ; Blastomyces antibody ² ; Coccidioides antibody ³ ; Cryptococcus antigen ⁴ ; Histoplasma antibody ⁵	\$60.75	1-2 ml serum ^{1,2,3,4,5} (separated). (Cerebrospinal Fluid ⁴ only valid for Cryptococcus antigen test). SHIP CHILLED.
<i>Hemophilia Panel, Small Animal</i>	aPTT ; PT ; TCT ; Factor VIII:C ; Factor IX:C ; vWF:Ag	\$59.50	2-3 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.
<i>Hemostasis Panel, Small Animal</i>	aPTT ; PT ; TCT ; vWF:Ag	\$43.25	2-3 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.
<i>Mineral Panel (Tissue, Feed)</i>	Ca ; P ; Mg ; Na ; K ; Cu ; Fe ; Mn ; Zn ; Mo	\$35.00	Submit 2 grams of tissue or 100g of feed . This is done primarily for copper (Cu), iron (Fe), and zinc (Zn) but the other elements are reported as well. SHIP TISSUE CHILLED.

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<u>Thyroid Panel, Canine: FT4 (Two Step), T4, T3, TSH, TgA</u>	<u>FT4 (Two Step); T4; T3; TSH; TgA</u>	\$50.00	3 ml serum (separated). SHIP CHILLED. (Other panel combinations available, see test and fee manual)
<u>Thyroid Panel, Canine: FT4d, T4, T3, TSH, TgA</u>	<u>FT4 (dialysis); T4; T3; TSH; TgA</u>	\$59.00	3 ml serum (separated). SHIP CHILLED. (Other panel combinations available, see test and fee manual)
<u>Thyroid Panel: FT4 (Two Step), T4, T3</u>	<u>FT4 (Two Step); T4; T3</u>	\$35.00	2 ml serum (separated). SHIP CHILLED. (Other panel combinations available, see test and fee manual)
<u>Thyroid Panel, OFA Canine Registry Cert</u>	<u>FT4 (Two Step); TSH; TgA</u>	\$49.00	2.5 ml serum (separated) from a plain red top tube only. SHIP CHILLED.

Other small animal panels available in the Clinical Pathology section (see Test and Fee Schedule for alphabetical listing or use hyperlink provided here):

- [Electrolytes Panel](#)
- [Electrolytes Panel, urine](#)
- [Iron Panel \(chemistry\)](#)
- [Mineral/Electrolytes Panel](#)
- [Mineral/Electrolytes Panel, urine](#)
- [Mineral Panel, urine](#)
- [Pre-Anesthesia Panel](#)
- [Small Animal Chemistry Panel](#)
- [Small Animal Liver Panel](#)
- [Small Animal Renal Panel](#)
- [Total Protein Creatinine Panel](#)
- [Total Protein Panel](#)

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