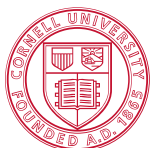


CANINE DIAGNOSTIC PLANS/PANELS



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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>	(3) Aerobic bacterial cultures ¹ (1 sensitivity included); Canine Brucella culture ⁺² ; Canine Distemper PCR ^{9*} ; Canine Herpes Virus FA ³ ; Canine Parvovirus (CPV-2) FA ⁴ ; Histopathology ⁵ ; Field Necropsy Surcharge ⁵ ; (2) Leptospira PCRs ⁶ ; Toxoplasma FA ⁷ ; Virus isolation ⁸ †Culture may detect Brucella canis but serologic testing of bitch is a superior test method. See Canine Abortion/Fading Puppy Serology Diagnostic Plan below. *If respiratory disease is suspected, consider Canine Distemper PCR on fresh lung tissue	\$553.25 per puppy	Fresh tissue ^{1,2,3,4,6,7,8} : lung ⁹ , placenta, stomach contents, kidney, liver, heart, adrenal, skin, heart blood in sterile red top tube AND Formalin fixed ⁵ : 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 Testing .
<i>Canine Abortion/Fading Puppy Serology Diagnostic Plan</i>	Canine Brucella Slide Agglutination/AGID II ; Canine Herpesvirus SN ; Leptospira MAT, 5 standard serovars ; Neospora IFA ; Toxoplasma gondii IgG ELISA ; T4 & Free-T4 by dialysis & TSH combination In unvaccinated animals may also want to consider Canine Adenovirus (CAV) SN , Canine Distemper Virus (CDV) SN , and Canine Parvovirus (CPV-2) HI . Additional test costs would apply.	\$156.00 single \$254.00 paired (1 thyroid panel)	Maternal serum (separated). SHIP CHILLED. 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.

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Canine Diarrhea Diagnostic Plan	<p>Anaerobic bacterial culture¹; Campylobacter jejuni culture²; Canine Parvovirus (CPV-2) ELISA³; Clostridium difficile toxins (A/B)⁴; Canine Enteric Coronavirus PCR⁵; Cryptosporidium ELISA⁶; Fecal qualitative exam⁷; Giardia ELISA⁸; Salmonella culture⁹ (1 sensitivity included); Virus isolation¹⁰</p> <p>[Canine Coronavirus FA¹¹; Canine Parvovirus (CPV-2) FA¹²; Histopathology¹³; Field Necropsy Surcharge¹³ can be added if necropsy samples are included]</p> <p>In puppies less than 10 days of age an Aerobic bacterial culture on feces or intestinal contents should also be considered.</p>	<p>\$342.25 (ante mortem samples)</p> <p>\$513.50 (full set of necropsy samples)</p>	<p>Ante mortem samples: Fresh feces^{2,3,5,6,7,8,9,10} in leak-proof container (20 g), fresh feces⁴ (5 g) (frozen), fecal swab^{2,9} placed in aerobic transport media (Amies with charcoal), fecal swab¹ placed in anaerobic transport media (Port-a-cul or Anaerobic Systems ATM). One fecal sample⁹ (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.</p> <p>Necropsy samples: Tied off loop of bowel with contents^{1,2,3,4,5,9,10,11,12} (frozen), +/- intestinal swab^{1,2,9} placed in anaerobic transport media (BBL[™] Port-a-cul[™] or Anaerobic Systems ATM), tied off loop of bowel with contents^{2,3,5,9,10,11,12} (fresh), fresh feces^{2,3,5,6,7,8,9,10} placed in leak-proof container (20 g), full set of tissues¹³ 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.</p>

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Canine Infectious Respiratory Diagnostic Plan	<p>Aerobic bacterial culture¹ (1 sensitivity included); Canine Distemper Virus (CDV) FA²; Canine Parainfluenza Virus (CPIV) FA³; Canine Respiratory Coronavirus PCR⁴; Cytology⁵; Fungal culture⁶; Fungal serology panel⁷; Histopathology⁸; Field Necropsy Surcharge⁸; Influenza virus matrix PCR⁹; Mycoplasma culture¹⁰; Virus isolation¹¹</p> <p>Testing for evidence of lungworms, qualitative fecal and an Occult Heartworm 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>\$445.50 (ante mortem samples)</p> <p>\$458.00 (full set of necropsy samples)</p>	<p>Ante mortem samples: transtracheal wash (TTW) (preferred sample) or bronchial alveolar lavage (BAL) fluid in RTT^{1,2,3,4,6,9,10,11}, EDTA tube⁵ (LTT) and (2) air dried slides⁵ of fluid, (1) swab inoculated with sample^{1,10} placed in aerobic transport media (Amies w/o charcoal), and serum⁷ (separated) SHIP CHILLED EXCEPT FOR SLIDES WHICH SHOULD BE AT ROOM TEMPERATURE. PROTECT SLIDES FROM FORMALIN EXPOSURE.</p> <p>It may be helpful to collect and bank a serum sample for possible acute and convalescent serology. [Nasal or pharyngeal swabs^{4,9,11} 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^{1,2,3,4,6,9,10,11} +/- (1) swab inoculated with sample^{1,9} and placed in aerobic transport media (Amies w/o charcoal) and full set of tissues⁸ placed in formalin. SHIP FRESH TISSUE AND SWAB CHILLED AND PROTECT FIXED TISSUE FROM FREEZING.</p>
Canine Respiratory Panel	<p>Bordetella PCR; Canine Adenovirus (CAV) PCR; Canine Distemper (CDV) PCR; Canine Parainfluenzavirus (CPIV) PCR; Canine Pneumovirus PCR; Canine Respiratory Coronavirus PCR; Influenza Virus Matrix PCR; Mycoplasma cynos PCR</p>	\$115.00	Nasal or pharyngeal swab in viral transport media or RTT with 0.5 ml sterile saline. Cotton, plastic, wood-handled, Dacron and other synthetic swabs are all acceptable. SHIP CHILLED.

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<i>Canine Liver Function/Porto-systemic Shunt Panel</i>	Bile acids (fasting panel)¹ ; Bile acids (post-prandial panel)² ; Protein C³ ; Small animal chemistry⁴	\$138.75	2 mL serum ^{1,2,4} (separated), citrate plasma ³ 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.
<i>Canine Neurologic Tissue Diagnostic Plan</i> <i>PLEASE STRONGLY CONSIDER RABIES TESTING AT YOUR STATE HEALTH DEPARTMENT</i>	Aerobic bacterial culture¹ ; Canine Distemper PCR² ; Fungal culture³ ; Histopathology⁴ ; Field Necropsy Surcharge⁴ ; Neospora IFA⁵ ; Toxic heavy metal screen⁶ ; Toxoplasma gondii IgG ELISA⁷ ; Virus isolation⁸ ; (2) West Nile Virus (WNV) IgM capture ELISAs⁹ ; West Nile Virus (WNV) PCR¹⁰ May also want to consider Cerebrospinal Fluid Cytology which requires CSF in EDTA tube (LTT) and (2) air dried slides of CSF. Protect slides from formalin exposure.	\$492.75	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 ^{1,2,3,8,10} placed in sterile container, serum ^{5,7,9} (separated) or heart blood in red top tube, fresh liver ⁶ in sterile container, full set of fixed tissues ⁴ 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.
<i>Canine Vaccine Panel 1</i>	Canine Distemper Virus (CDV) SN ; Canine Parvovirus (CPV-2) HI	\$33.00	2 ml serum (separated). SHIP CHILLED.
<i>Canine Vaccine Panel 2</i>	Canine Distemper Virus (CDV) SN ; Canine Parvovirus (CPV-2) HI ; Canine Adenovirus-1 (Infectious Canine Hepatitis) SN	\$49.50	3 ml serum (separated). SHIP CHILLED.
<i>Canine Vaccine Panel 3</i>	Canine Distemper Virus (CDV) SN ; Canine Parvovirus (CPV-2) HI ; Canine Coronavirus SN	\$49.50	3 ml serum (separated). SHIP CHILLED.
<i>Coagulation Panel + Fibrinogen</i>	aPTT ; Fibrinogen (Clauss method) ; PT ; TCT	\$34.00	2 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.

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<u>Coagulation Panel, Small Animals</u>	<u>aPTI</u> ; <u>PT</u> ; <u>TCT</u>	\$27.25	2 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.
<u>Cornell Canine Liver Panel</u>	<u>Bile acids (fasting panel)¹</u> ; <u>Bile acids (post-prandial panel)²</u> ; <u>Coagulation Panel + Fibrinogen³</u> [<u>aPTI</u> ; <u>PT</u> ; <u>TCT</u> ; <u>Fibrinogen (Claus method)</u>]; <u>Hemogram, routine (CBC)⁴</u> ; <u>Protein C⁵</u> ; <u>Small animal chemistry⁶</u>	\$214.75	EDTA whole blood⁴ (LTT) , (2) air dried blood smears⁴ , 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.
<u>DIC Panel, Small Animal</u>	<u>aPTI</u> ; <u>PT</u> ; <u>Fibrinogen (Claus method)</u> ; <u>Antithrombin</u> ; <u>D-dimer</u>	\$88.50	2 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.

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Dermatology Diagnostic Plan	Aerobic bacterial culture ¹ (1 sensitivity included); Biopsy for parasite exam ² ;	Deep lesion: \$334.00	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 , and 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(Immulite), 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(Immulite), T4, T3, TSH, TgA]; Skin scraping for ectoparasite identification ⁸ ; Cytology ⁹	Superficial lesion: \$314.00	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, multiple formalin fixed skin biopsies ⁶ , and serum ^{3,7} (separated). No aerobic culture is included in the superficial plan. SHIP AT ROOM TEMPERATURE AND PROTECT FROM TEMPERATURE EXTREMES. PROTECT SLIDES FROM FORMALIN EXPOSURE.
	All skin biopsy submissions should be accompanied by a Dermatohistopathology Submission Form . For additional guidance refer to Dermatopathology Sampling Guide .		For additional information on endocrinology testing options see Canine Adrenal Function Tests.

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<u>Fever of Unknown Origin Diagnostic Plan</u>	(3) <u>Blood culture, aerobic/fungal</u> ¹ (1 sensitivity included); (3) <u>Blood culture, anaerobic</u> ² ; <u>Fibrinogen (heat-precipitated)</u> ³ ; <u>Hemogram, routine (CBC)</u> ⁴ (examination for blood parasites included); (2) <u>Virus Isolations</u> ⁵ (nasal, whole blood) If case is chronic, virus isolation can be omitted if desired, see comment to right.	\$336.00 Chronic case with no virus isolation \$266.00	(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 <u>Blood Culture Technique</u> for more information. To order blood culture bottles go to <u>shipping services</u> or call 607.253.3935. 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 Small Animal Internal Medicine , 5 th Edition, 2014, Nelson RW and Couto CG; Chapter 88: Fever of Unknown Origin , pages 1279-1282 for other ideas of testing.
<u>Fungal Serology Panel</u>	<u>Aspergillus antibody</u> ¹ ; <u>Blastomyces antibody</u> ² ; <u>Coccidioides antibody</u> ³ ; <u>Cryptococcus antigen</u> ⁴ ; <u>Histoplasma antibody</u> ⁵	\$64.00	1-2 ml serum ^{1,2,3,4,5} (separated). (Cerebrospinal Fluid ⁴ only valid for Cryptococcus antigen test). SHIP CHILLED.
<u>Hemophilia Panel, Small Animal</u>	<u>aPTI</u> ; <u>PT</u> ; <u>TCT</u> ; <u>Factor VIII:C</u> ; <u>Factor IX:C</u> ; <u>vWF:Ag</u>	\$69.75	2-3 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.
<u>Hemostasis Panel, Small Animal</u>	<u>aPTI</u> ; <u>PT</u> ; <u>TCT</u> ; <u>vWF:Ag</u>	\$44.50	2-3 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.

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<u>Mineral Panel (Tissue, Feed)</u>	<u>Ca; P; Mg; Na; K; Cu; Fe; Mn; Zn; Mo</u>	\$47.00	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.
<u>Thyroid Panel, Canine: FT4 (Immulite), T4, T3, TSH, TgA</u>	<u>FT4 (Immulite); T4; T3; TSH; TgA</u>	\$67.00	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>	\$75.00	3 ml serum (separated). SHIP CHILLED. (Other panel combinations available, see test and fee manual)
<u>Thyroid Panel: FT4 (Immulite), T4, T3</u>	<u>FT4 (Immulite); T4; T3</u>	\$43.00	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 (dialysis); TSH; TgA</u>	\$66.00	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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