

## Peace of mind!

We will screen for some of the following conditions to determine your pet's health status and ability to tolerate anesthesia.



### Liver

Biochemistry tests can indicate:

- Liver disease
- Dehydration
- Obstruction of the bile ducts
- Abnormalities resulting from long-term medications



### Heart and Lungs

Immunoassay tests can detect heartworm infection, which can cause disease in the heart as well as in the lungs.



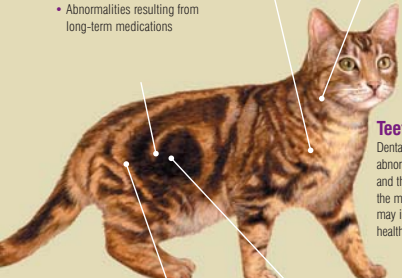
### Thyroid

Biochemistry and serum T<sub>4</sub> tests can indicate thyroid disease.



### Teeth

Dental exams uncover abnormalities in teeth and the soft tissue of the mouth. Oral disease may indicate secondary health problems.



### Blood

CBC is used to screen for:

- Anemia (low red blood cells)
- Inflammation
- Infection
- Stress
- Leukemia
- Bleeding problem
- Inability to fight infection
- Hydration status



### Kidney

Blood and urine tests can indicate:

- Early kidney disease
  - Kidney failure
  - Infection
  - Stones
  - Cancer
  - Abnormalities resulting from long-term medications
- Urinalysis and urine protein: creatinine ratio tests are used to better evaluate:
- Kidney function
  - Urinary Tract
  - Kidney infection



### Pancreas and Intestine

Biochemistry tests can indicate:

- Pancreatitis (inflammation of the pancreas)
  - Diabetes mellitus
  - Abnormalities resulting from long-term medications
  - Cancer
- Fecal tests identify parasites that can cause:
- Diarrhea
  - Weight loss
  - Blood loss
  - Infections in humans (zoonosis)

## Help us keep your pet healthy with preanesthetic testing.

To ensure your pet can properly process and eliminate an anesthetic, we run tests to confirm that your pet's organs are functioning properly and to find hidden health conditions that could put your pet at risk.

### THE TOP FOUR REASONS TO TEST YOUR PET BEFORE ANESTHESIA:

#### 1. Enjoy peace of mind.

Testing can significantly reduce medical risk.

#### 2. Detect hidden illness.

Healthy-looking pets may be hiding symptoms of a disease or ailment. Testing helps detect this kind of illness so we can avoid problems with anesthesia.

#### 3. Reduce risks and consequences.

If the preanesthetic testing results are normal, we can proceed with confidence. If not, we can alter the anesthetic procedure or take other precautions to safeguard your pet's health.

#### 4. Protect your pet's future health.

These tests become part of your pet's medical record, providing a baseline for future reference.

Call us if you have questions or need more complete information about your pet's procedure.

telephone

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What you should know about

## Anesthesia and your pet



## Early detection, early intervention...



### Liver

Biochemistry tests can indicate:

- Liver disease
- Cushing's syndrome
- Abnormalities resulting from long-term medications



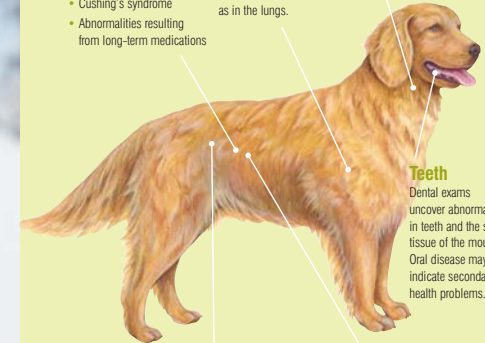
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# To help ensure safe anesthesia for your pet, we will run a combination of the following tests.

## HEMATOLOGY

**Complete Blood Count (CBC)** A CBC provides detailed information about red blood cells, white blood cells and platelets. The total white blood cell count, along with individual leukocyte counts, can help identify underlying stress, inflammation, an inability to fight infection and potentially, leukemia.

Low platelet numbers can indicate a potential bleeding problem. We might advise that surgery be delayed if anemia, inflammation or especially a low platelet count is present because these conditions could cause serious surgical complications.

## BLOOD CHEMISTRY

### PREANESTHETIC PANEL (PAP)

**Alkaline Phosphatase (ALKP)** An enzyme present in multiple tissues, including liver and bone. Elevated levels can indicate liver disease, Cushing's syndrome or steroid therapy.

**Total Protein (TP)** The level of TP can indicate a variety of conditions, including dehydration, inflammation and diseases of the liver, kidney or intestine.

**Blood Urea Nitrogen (BUN)** BUN is produced by the liver and excreted by the kidneys. Abnormally high levels can indicate kidney disease or dehydration, and low levels can be associated with liver disease.

**Alanine Aminotransferase (ALT)** An enzyme that becomes elevated with liver cell injury.

**Creatinine (CREA)** Creatinine is a byproduct of muscle metabolism and is excreted by the kidneys. Elevated levels can indicate kidney disease, urinary tract obstruction or dehydration.

**Blood Glucose (GLU)** High levels can indicate diabetes. In cats, high levels can also indicate stress, which can be a result of the trip to the veterinary hospital. Low levels can indicate liver disease, infection or certain tumors.

### GENERAL HEALTH PROFILE (GHP) [PAP PLUS THE FOLLOWING TESTS]

**Albumin (ALB)** A protein that is produced by the liver. Reduced levels of this protein can point to chronic liver, kidney, inflammatory or intestinal disease.

**Cholesterol (CHOL)** Elevated levels of cholesterol are seen in a variety of disorders, including hypothyroidism and liver or kidney disease.

**Total Bilirubin (TBIL)** Bilirubin is a breakdown product of hemoglobin, as well as a component of bile. Blood bilirubin levels are useful in indicating liver disease and may help identify certain types of anemia.

**Amylase (AMYL)** An enzyme produced by the pancreas. The pancreas secretes amylase to aid in digestion. Elevated levels in the blood can indicate pancreatic disease.

**Phosphorus (PHOS)** Elevated phosphorus can be an indicator of kidney disease.

**Calcium (Ca<sup>+</sup>)** Increased levels can be seen with diseases of the parathyroid gland and kidneys, or as an indicator of certain types of tumors.

## ELECTROLYTES

**Sodium, Potassium, Chloride (Na<sup>+</sup>, K<sup>+</sup>, Cl<sup>-</sup>)** The balance of these electrolytes is vital to your pet's health. Abnormal levels can be life-threatening. Electrolyte tests are important when evaluating vomiting, diarrhea, dehydration and cardiac (heart) symptoms.

## URINALYSIS

**(UA)** The urine contains byproducts from many organs, such as the kidneys, liver and pancreas. Abnormal levels of these byproducts can indicate diabetes or liver or urinary tract disease.

## ELECTROCARDIOGRAM

**(ECG)** Detects heart rate and electrical rhythm. Certain abnormal rhythms and heart rates can be harmful to animals undergoing anesthesia.

## ENDOCRINOLOGY

**Thyroxine (T<sub>4</sub>)** This is a measurement of the level of thyroid hormone circulating in the blood, and is helpful in identifying thyroid disease. Thyroid disease occurs in both dogs and cats, and can have a serious impact on health if left untreated. Testing is especially important in cats older than seven years.

## OTHER TESTS

**Heartworm** Heartworms are parasites that can live in the heart, major blood vessels and the lungs. Left untreated, heartworms can be life-threatening.

**Gamma-Glutamyl Transferase (GGT)** Increases in GGT, a liver enzyme, are a measure of cholestasis.

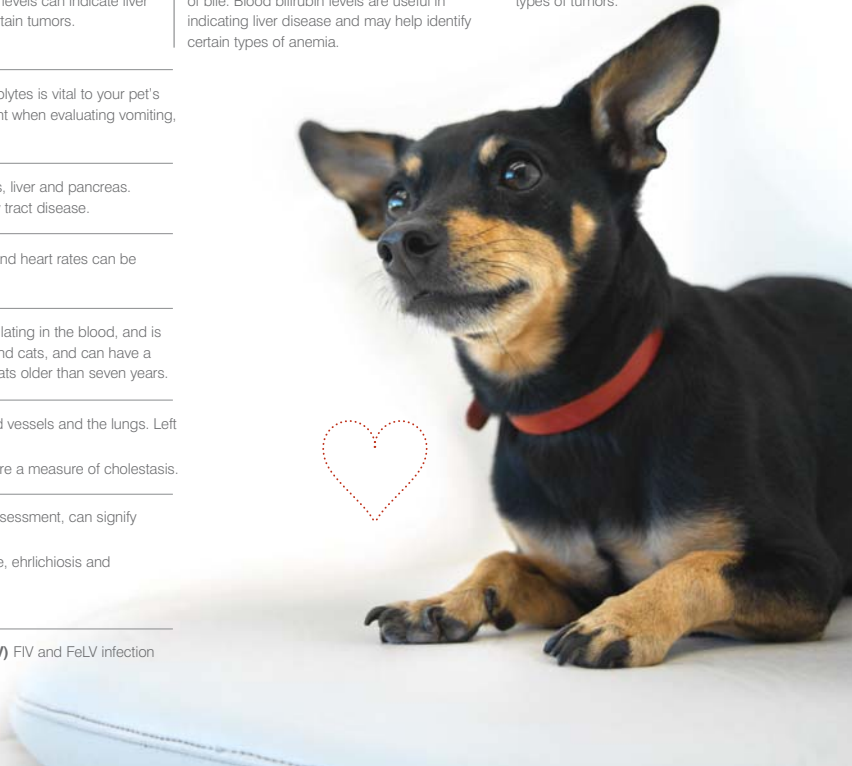
## CANINE-SPECIFIC TESTS

**Lipase (LIPA)** Elevated levels of lipase in the blood, along with a clinical assessment, can signify possible pancreatitis, gastrointestinal disease and certain drug treatments.

**Tick-Borne Diseases** Common tick-borne diseases, such as Lyme disease, ehrlichiosis and anaplasmosis, can cause serious illness.

## FELINE-SPECIFIC TESTS

**Feline Immunodeficiency Virus (FIV) and Feline Leukemia Virus (FeLV)** FIV and FeLV infection are two of the most serious, life-threatening illnesses in cats.



## Appointment schedule



Pet: \_\_\_\_\_

Date: \_\_\_\_\_

Doctor: \_\_\_\_\_

Telephone number: \_\_\_\_\_

### Reason for appointment:

Dental procedure  X-ray or ultrasound\*

Spay/Neuter  Ear flushing\*

Grooming\*

Surgery \_\_\_\_\_

Other \_\_\_\_\_

\*We will administer a sedative if your pet is too anxious or overactive for this procedure.

Suggested Preanesthetic Testing Guidelines		
<input type="checkbox"/> Youth (<1 year) Healthy	<input type="checkbox"/> Adult (1-7 years) Healthy	<input type="checkbox"/> Senior (+7 years) Sick all ages
<b>All Small Pets</b>		
CBC	CBC	CBC
PAP	GHP or (PAP + ALB)	GHP or DHP*
ALB <sup>†</sup>	—	—
Electrolytes	Electrolytes	Electrolytes
UA	UA	UA
ECG	ECG	ECG
—	—	T <sub>4</sub>
—	GGT	GGT
—	Heartworm	Heartworm
<b>Canine-Specific</b>		
—	LIPA	LIPA
Tick-borne Diseases	Tick-borne Diseases	Tick-borne Diseases
<b>Feline-Specific</b>		
FIV/FeLV	FIV/FeLV	FIV/FeLV

\*The Diagnostic Health Panel (DHP) gives you a choice when establishing a minimum database. LIPA monitors pancreatic health and GGT better characterizes cholestatic liver disease in dogs and cats. This is the recommended testing protocol for any patient when illness is suspected prior to an anesthetic event.

<sup>†</sup>ALB (albumin) plays a role in maintaining oncotic pressure, regulating blood volume as well as transporting many hormones, drugs and other substances used during anesthesia. ALB is also used to determine GLOB (globulin) levels.