

# Pre-Anesthetic Testing

## Why Is Testing Necessary?

When you place your pet in the trust of the staff at **All Pets Veterinary Hospital**, you can rely on us to provide your pet with the best possible care. You expect us to provide you with advice to allow you to make the best decisions for your pet.

As in human medicine, the anesthetics available for our pet are very safe. As a result, the anesthetic risk is minimized in the healthy pet. It is our job to ensure that your pet can properly process and eliminate the anesthetics he/she is given. We perform pre-anesthetic testing to confirm that your pet's organs are functioning properly and to help reveal any hidden health conditions that could put your pet at risk both during and after the anesthetic procedure.

### The Top 4 Reasons To Test Your Pet Before Anesthesia

***You deserve peace of mind.*** Testing can significantly reduce medical risk and ensure your pet's health and safety.

***Pets can't tell us when they don't feel well.*** A healthy-appearing pet may be hiding symptoms of a disease or ailment. For example, a pet can lose up to 75% of kidney function before showing any visible signs of illness. Testing helps us evaluate your pet's health up front, so we can avoid problems related to anesthesia.

***Testing can reduce risk and consequences.*** If pre-anesthetic results are within normal ranges, we can proceed with confidence, knowing that anesthetic risk is minimized. On the other hand, if results are not within the normal ranges, we can alter the anesthetic procedure, or take other precautions to safeguard your pet's health and reduce the risk of potential complications.

***Testing can help protect your pet's future health.*** These tests provide baseline levels for your pet and become part of his/her medical record for future reference.

Although performing pre-anesthetic testing cannot guarantee the absence of complications, it can significantly minimize the risk.

### Some Tests That May Be Performed

#### HEMATOLOGY

***Hematocrit (Hct)*** Provides information on the amount of red blood cells present in the blood. A low hematocrit indicates anemia.

***Complete Blood Count (CBC)*** A more complete panel of test providing information on red blood cells, white blood cells and platelets. The total white blood cell count and individual cell counts can indicate leukemia, stress, inflammation, or an inability to fight infection. Low platelets can indicate a bleeding problem.

#### ELECTROLYTES

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

### BLOOD CHEMISTRY

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

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

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

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

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

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

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

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

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

**Phosphorus (PHOS)** Elevated phosphorus can be an indicator of 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 possibly help characterize anemia.

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

### Other Tests That May Be Recommended

**Thyroid-T4/ft4** Thyroid disease can occur in both dogs and cats, and can have a serious impact on health f left untreated.

**Urinalysis** The urine contains by-products from many organs, such as the kidneys, liver and pancreas. Abnormal levels of these by-products can indicate diabetes, liver or urinary tract disease.