

Pre-anesthetic and diagnostic testing

Why they're important for your pet's health

Testing can identify hidden health problems

Testing can reduce risk

We recommend some or all of the following tests to determine your pet's health status, so we make the best medical decisions, especially before administering anesthesia.

Although performing these tests cannot guarantee that complications won't occur, it can reduce the risk to your pet and provide you peace of mind.

Testing can provide you with peace of mind

If your pet is going to be placed under anesthesia, we strongly recommend pre-anesthetic testing. Anesthesia is extremely safe for healthy pets. But, if your pet is not healthy (and sometimes it's hard to tell without testing), complications can occur both during and after the anesthetic procedure. We can minimize potential risk when we know the health status of your pet before administering anesthesia.

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 signs of the illness. Testing helps us evaluate the health of your pet's liver and kidneys, so we can avoid problems related to anesthesia.

Testing can reduce risks. If results of the pre-anesthetic are within normal ranges, we can proceed with confidence, knowing the anesthetic risk is minimized. On the other hand, if results are not within normal ranges, we alter the anesthetic procedure to safeguard your pet's health.

Your pet test guide

Blood Chemistry

Albumin (ALB) – A protein which is produced by the liver. Reduced levels of this protein can point to chronic liver or kidney disease, intestinal disease, or intestinal parasites such as hookworm infection.

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

Alkaline Phosphatase (ALKP) – An enzyme produced by the cells lining the gall bladder and its associated ducts. Elevated levels can indicate liver disease or Cushing's syndrome.

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

Blood Urea Nitrogen (BUN) – BUN is produced by the liver and excreted by the kidneys. Abnormal levels can indicate dehydration, and liver and kidney abnormalities.

Calcium (Ca²⁺) – Increased levels can be seen with diseases of the parathyroid gland and kidneys or as an indicator of certain types of tumors.

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

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

Blood Glucose (GLU) – High levels can indicate diabetes. In cats, high levels can indicate stress, which can merely be a result of the trip to the veterinary 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 and is a component of bile. Bilirubin is secreted by the liver into the intestinal tract. Blood bilirubin levels are useful in diagnosing anemia and problems in the bile ducts.

Total Protein (TP) – The level of TP can detect a variety of conditions including dehydration and diseases of the liver, kidney or gastrointestinal tract.

Hematology

Hematocrit (HCT) – Provides information of the amount of red blood cells (RBCs) present in the blood. A low hematocrit indicates anemia.

Complete Blood Count (CBC) – A more complete panel of tests. A CBC provides detailed information on RBC's, white blood counts (WBCs) and platelets. The total WBC and differential (individual cell counts) can indicate infection, leukemia, stress, inflammation, or an inability to fight infection. Low platelets can indicate a blood problem. We might advise that surgery be delayed if anemia, infection or especially a low platelet count is present because these conditions could cause serious surgical complications.

Electrocardiogram

Detects heart rate and electrical rhythm. Certain abnormal rhythms and heart rates can be deleterious to animals undergoing anesthesia.