

## **Glenway Animal Hospital**

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## **Understanding Your Pet's Blood Work**

It is important to perform blood tests on all animals whether healthy or sick as these provide important information in regards to the well being of your pet. We perform blood tests for many reasons including base-line tests to gauge what is "normal" for your pet, when you pet is sick, for diagnostics or for presurgical evaluation. This guide is meant to serve as a helpful tool in understanding the purpose of your pet's blood work. If you have questions, please do not hesitate to call us.

**Complete Blood Count (CBC):** This is the most common test performed on pets and people. A CBC gives information on hydration status, anemia, infection, the blood's clotting ability, and the ability of the immune system to respond to challenges. This test is essential for pets with fevers, vomiting, diarrhea, weakness, pale gums, or less of appetite. If your pet needs surgery, a CBC can help detect bleeding disorders or other unseen abnormalities.

- RBC (Red Blood Cells), these cells carry oxygen to all the tissues in the body
- HCT (Hematocrit) measures the percentage of red blood cells to detect anemia and dehydration.
   This can also be done at Glenway Animal Hospital and is actually preformed on all surgery patients the morning of their procedure.
- Hb and MCHC (Hemoglobin and Mean Corpuscular Hemoglobin Concentration) are the oxygencarrying pigments of red blood cells.
- WBC (White Blood Cell Count) measures the body's immune cells. Increases or decreases indicate certain diseases of infections.
- EOS (Eosinophils) is a specific type of white blood cells that may indicate allergic or parasitic conditions.
- PLT (Platelet Count) measures cells that help form blood clots.

**Blood Chemistries (profile):** The following common blood tests evaluate organ function, electrolyte status, hormone levels and more. They are important for evaluating sick pets, pets receiving long-term medications, and health before anesthesia.

- ALKP (alkaline Phosphatase) elevations may indicate liver damage, Cushing's disease, and active bone growth in young pets.
- ALT (Alanine Aminotranferase) is a sensitive indicator of active liver damage but doesn't indicate
  the cause.
- AMYL (amylase) elevations can show pancreatitis or kidney disease.

- AST (Aspartate Aminotransferase) increases may indicate liver, heart, or skeletal muscle damage.
- BUN (blood urea nitrogen) indicates kidney function. An increased blood level is called azotemia and can be caused by kidney, liver, and heart disease, urethral obstruction, shock and dehydration.
- Ca (Calcium) deviations can indicate a variety of diseases. Tumors, hyperparathyroidism, kidney disease, and low albumin are just a few of the conditions that alter serum calcium.
- CHOL (Cholesterol) is used to supplement a diagnosis of hypothyroidism, liver disease, Cushing's disease and diabetes mellitus.
- CREA (Creatinine) reveals kidney function. This test helps distinguish between kidney and nonkidney causes of elevated BUN.
- GLU (Glucose) is a blood sugar. Elevated levels may indicate diabetes mellitus. Low levels can cause collapse, seizures, or coma.
- K (potassium) and Na (Sodium) are electrolytes. Altered levels may indicate Addison's disease.
- LIP (Lipase) is an enzyme that may indicate pancreatitis.
- Na (Sodium) is an electrolyte that helps with the determination of hydration status.
- PHOS (Phosphorus) elevations are often associated with kidney disease.
- T4 (Thyroxine) is a thyroid hormone. When doing bloodtests on animals over the age of 5, we typically include the T4 as older pets have increased risk of thyroid problems. Decreased levels can indicate hypothyroidism in dogs, while increased levels can indicate hypothyroidism in cats.

As stated above, this is meant to serve a guide to help you understand what we are looking for when performing blood tests on your pet. If you have any questions or would like any more information, please call us (513) 662-0224.