

UNDERSTANDING YOUR PET'S BLOOD WORK

Complete blood count (CBC)

This is the most common blood 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. This test is essential for pets with fevers, vomiting, diarrhea, weakness, pale gums, or loss of appetite. If your pet needs surgery, a CBC can detect bleeding disorders or other unseen abnormalities.

- ❑ **HCT** (hematocrit) measures the percentage of red blood cells to detect anemia and dehydration.
- ❑ **Hb & MCHC** (hemoglobin & mean corpuscular hemoglobin concentration) measures the oxygen-carrying proteins of red blood cells.
- ❑ **WBC** (white blood cell count) measures the body's immune cells. Increases or decreases indicated certain diseases or infections.
- ❑ **GRANS & L/M** (granulocytes & lymphocytes/monocytes) are specific types of white blood cells.
- ❑ **EOS** (eosinophils) are a specific type of white blood cell that may indicate allergic or parasitic conditions.
- ❑ **PLT** (platelet count) measures cells that form blood clots.
- ❑ **RETICS** (reticulocytes) are immature red blood cells. High levels indicate regenerative anemia.

Blood Chemistries

These common blood serum tests evaluate organ function, electrolyte status, hormone levels, and more. They're important in evaluating older pets, pets with vomiting and diarrhea or toxin exposure, pets receiving long-term medications, and overall health before anesthesia.

- ❑ **ALB** (albumin) is a serum protein that helps evaluate hydration, hemorrhage, and intestinal, liver, and kidney disease.
- ❑ **ALKP** (alkaline phosphatase) elevations may indicate liver damage, Cushing's disease, and active bone growth in young pets. This test is especially important in cats.
- ❑ **ALT** (alanine aminotransferase) is a sensitive indicator of active liver damage but doesn't indicate the cause.
- ❑ **AMYL** (amylase) elevations show pancreatitis or kidney disease.

- ❑ **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 disease. Tumors, hyperparathyroidism, kidney disease, and low albumin are just a few of the conditions that alter serum calcium.
- ❑ **CHOL** (cholesterol) is used to supplement diagnosis of hyperthyroidism, liver disease, Cushing's disease, and diabetes mellitus.
- ❑ **CL** (chloride) is an electrolyte often lost with vomiting and Addison's disease. Elevations often indicate dehydration.
- ❑ **CREA** (creatinine) reveals kidney function. This test helps distinguish between kidney and nonkidney causes of elevated BUN.
- ❑ **GLOB** (globulin) is a blood protein that often increases with chronic inflammation and certain disease states.
- ❑ **GLU** (glucose) is a blood sugar. Elevated levels may indicate diabetes mellitus. Low levels can cause collapse, seizures, or coma.
- ❑ **K** (potassium) is an electrolyte lost with vomiting, diarrhea, or excessive urination. Increased levels may indicate kidney failure. Addison's disease, dehydration, and urethral obstruction. High levels can lead to cardiac arrest.
- ❑ **Na** (sodium) is an electrolyte lost with vomiting, diarrhea, kidney disease, and Addison's disease. This test helps indicate hydration status.
- ❑ **PHOS** (phosphorus) elevations are often associated with kidney disease, hyperthyroidism, and bleeding disorders.
- ❑ **TBIL** (total bilirubin) elevations may indicate liver or hemolytic disease. This test helps identify bile duct problems and certain types of anemia.
- ❑ **TP** (total protein) indicates hydration status and provides additional information about the liver, kidneys and infectious diseases.
- ❑ **T4** (thyroxine) is a thyroid hormone. Decreased levels often signal hypothyroidism in dogs, while high levels indicate hyperthyroidism in dogs, while high levels indicate hyperthyroidism in cats.