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| **Anemia** | **Dehydration** | **Infection** |
| **CBC Indication: Low RBC*** Condition in which there is a lack of sufficient healthy red blood cells (RBC) in your body
* Indicator for other health issues (e.g., low iron, lung damage, low blood oxygen)
 | **CBC Indication: Reduced Plasma Volume*** Occurs when a person uses or loses more fluids than they take in
* Can occur without any illness or infection
 | **CBC Indication: Increased WBC*** Presence of one or more pathogens in the body
* Physical indication: presence of heat, pain, redness, swelling, and sometimes loss of function
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| **Leukemia** | **Leukopenia** | **Polycythemia** |
| **CBC Indication: High WBC*** Malignant, progressive disease in which bone marrow produces too many, immature, or abnormal white blood cells
* A term used for several different cancers of the blood and blood-forming tissues
 | **CBC Indication: Low WBC*** Can result from infection or medication
* Can be caused by Rheumatoid Arthritis, vitamin deficiency, or side effect of cancer
 | **CBC Indication: High RBC, Reduced Plasma Volume*** Rare condition
* Blood is thicker, which increases blood pressure, which increases risk for stroke and tissue or organ damage
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| **Sickle Cell Anemia** | **Thrombocytopenia** | **Thrombocytosis** |
| **CBC Indication: Low RBC, Misshapen Cells*** Painful condition where red blood cells are crescent/sickle shaped, sticky, and rigid
* RBCs die quickly resulting in a shortage and also low levels of oxygen in the blood
 | **CBC Indication: Low Platelets*** Can indicate anemia, leukemia, heavy alcohol use, medication, viral infection, bone and bone marrow disorders, or immune system disorders
 | **CBC Indication: High Platelets*** Indicates infection
* When no apparent underlying condition is known, it could be due to bone or bone marrow disease.
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| **Erythrocytes** | Red blood cells (RBC) |
| **Hemoglobin** | Protein carried on red blood cells; contains iron; gives blood its red color |
| **Leukocytes** | White blood cells (WBC) |
| **Macrophage** | A large leukocyte able to destroy old, damaged, and dead cells |
| **Thrombocytes** | Platelets |
| **Coagulation** | When blood becomes jelly-like and clumps together to form a clot |
| **Plasma** | The liquid portion of blood |