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**Lab Dept:** Hematology

**Test Name:** WBC COUNT, BLOOD

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***General Information***

**Lab Order Codes:** WBC

**Synonyms:** White Cell Count; Total WBC; Leukocyte Count

**CPT Codes:** 85048 – Blood count; white blood cell (WBC)

**Test Includes:** White blood count reported in k/uL (x 10<sup>3</sup>/uL).

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***Logistics***

**Test Indications:** Useful in determining and following treatment for leukocytosis or leukopenia.

**Lab Testing Sections:** Hematology

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 hour

**Special Instructions:** N/A

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***Specimen***

**Specimen Type:** Whole blood

**Container:** EDTA Lavender top tube or EDT Lavender Microtainer®

**Draw Volume:** Lavender (EDTA) 2 mL Vacutainer tube: Minimum fill volume of **1 mL** is required. Allow the tube to fill until the vacuum is exhausted, and blood flow ceases.

Lavender (EDTA) Microtainer® tube: Minimum of **0.5 mL** is required. To be used for neonates, collected volumes <1.0 mL, or when a capillary (skin puncture) collection is required

**Processed Volume:** Same as Draw Volume

**Stability:** Optimal when run within in 4 hours of collection.  
Stable 48 hours refrigerated for CBC parameters

<b>Collection:</b>	Venipuncture or Capillary collection
<b>Special Processing:</b>	Lab Staff: Do NOT centrifuge. Process as whole blood.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Improper tube; clotted sample; underfilled tube; overfilled tube; mislabeled or unlabeled specimens

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***Interpretive***

<b>Reference Range:</b>	Age dependent; <a href="#">Refer to CBC Reference Value Table</a>	
<b>Critical Values:</b>	0 – 7 days:	<5.0 or >35.0 x 10 <sup>3</sup> /uL
	Others:	<2.0 or >25.0 x 10 <sup>3</sup> /uL

**Limitations:** Lipemia, elevated WBC and cold agglutinins may prolong the turnaround time of the specimen.

**Methodology:** Hydrodynamic focusing, impedance

**References:** Harmening DH (1997) Clinical Hematology and Fundamentals of Hemostasis, 3<sup>rd</sup> ed

Oski and Nathan (1998) Hematology of Infancy and Childhood. 5<sup>th</sup> ed

**Updates:** 4/29/2005: Critical values updated for 0-7-day range, previously listed as <5.0 or >30.0 x10<sup>3</sup>/uL

4/2/2025: updated volume requirements and stability