

Laboratory Reference Ranges

Hematology

Test	Reference Range		
	Age	Gender	Range
WBC $\times 10^3/\mu\text{L}$	0d	M,F	9.0-35.0
	4d	M,F	5.0-21.0
	10d	M,F	5.0-20.0
	15d	M,F	5.0-19.5
	1m	M,F	6.0-17.5
	6m	M,F	6.0-17.0
	2y	M,F	5.5-15.5
	5y	M,F	5.0-14.5
	9y	M,F	4.5-13.5
	13y	M,F	4.5-13.0
	18y	F	3.8-11.8
		M	3.6-10.2
RBC $\times 10^6/\mu\text{L}$	0d	M,F	3.30-6.30
	1d	M,F	4.00-6.60
	7d	M,F	3.90-6.30
	14d	M,F	3.60-6.20
	1m	M,F	3.00-5.40
	2m	M,F	2.70-4.90
	3m	M,F	3.10-4.50
	6m	M,F	3.70-5.30
	2y	M,F	3.90-5.30
	6y	M,F	4.00-5.20
	12y	F	4.10-5.10
		M	4.50-5.30
	18y	F	3.63-4.92
		M	4.06-5.63
HGB g/dL	0d	M,F	14.5-22.5
	7d	M,F	13.5-19.5
	14d	M,F	12.5-20.5
	1m	M,F	10.0-18.0
	2m	M,F	9.0-14.0
	3m	M,F	9.5-13.5
	6m	M,F	10.5-13.5
	2y	M,F	11.5-15.5
	12y	F	11.5-14.3
		M	13.0-16.0
	18y	F	11.5-14.3
		M	13.2-16.3

Reviewed by:
Elizabeth Plocharczyk, MD
AUG 21 2025
x 

Test	Reference Range		
	Age	Gender	Range
HCT %	0d	M,F	42-66
	14d	M,F	39-63
	1m	M,F	31-55
	2m	M,F	28-42
	6m	M,F	33-39
	2y	M,F	34-40
	6y	M,F	35-45
	12y	M,F	36-45
	18y	F	35-45
MCV fL		M	38-53
	0d	M,F	88-126
	14d	M,F	86-123
	1m	M,F	85-123
	2m	M,F	77-115
	3m	M,F	74-108
	6m	M,F	70-86
	2y	M,F	75-87
	6y	M,F	77-96
MCH pg	18y	M,F	80-97
	0d	M,F	28-40
	2m	M,F	26-32
	3m	M,F	25-32
	6m	M,F	23-30
	2y	M,F	24-30
	6y	M,F	25-31
	12y	M,F	25-32
MCHC g/dL	17y	M,F	27-33
	0d	M,F	29-37
	7d	M,F	28-38
	2m	M,F	28-36
	4m	M,F	29-37
	6m	M,F	32-37
	2y	M,F	30-36
RDW %	12y	M,F	31-36
	0d	M,F	12-17
PLT x10 ³ /μl	0d	M,F	150-450
MPV fL	0d	M,F	6.8-11.3
	13y	M,F	7.5-11.2

Test	Reference Range		
	Age	Gender	Range
#NE $\times 10^3/\mu\text{l}$	0d	M,F	3.0-28.0
	4d	M,F	1.0-13.0
	10d	M,F	1.0-10.0
	15d	M,F	1.0-9.0
	1m	M,F	1.0-8.0
	2y	M,F	1.5-8.5
	5y	M,F	1.5-9.0
	9y	M,F	1.5-9.5
	18y	M,F	1.5-7.6
#LY $\times 10^3/\mu\text{l}$	0d	M,F	2.0-10.0
	4d	M,F	2.0-8.0
	10d	M,F	2.0-9.0
	15d	M,F	2.0-10.0
	1m	M,F	2.0-12.0
	6m	M,F	3.0-13.0
	2y	M,F	2.0-10.0
	5y	M,F	1.4-7.0
	9y	M,F	1.3-6.5
	13y	M,F	1.1-6.0
	18y	M,F	1.0-4.8
#MO $\times 10^3/\mu\text{l}$	0d	M,F	0.2-2.2
	4d	M,F	0.1-2.9
	15d	M,F	0.2-5.0
	1m	M,F	0.2-2.1
	2m	M,F	0.3-1.9
	2y	M,F	0.4-1.1
	13y	M,F	0.4-0.9
	18y	F	0.0-0.9
		M	0.0-1.1
#EO $\times 10^3/\mu\text{l}$	0d	M,F	0.0-0.9
	1m	M,F	0.0-0.6
	5y	M,F	0.0-0.7
	12y	M,F	0.0-0.5
#BA $\times 10^3/\mu\text{l}$	0d	M,F	0.0-0.5
	4d	M,F	0.0-0.4
	2m	M,F	0.0-0.2
	13y	M,F	0.0-0.1
NRBC /100 WBC	0d	M,F	0.0-2.0
	4d	M,F	0.0-1.0
Band %	0d	M,F	0-8
Metamyelocyte %	0d	M,F	0-2
Myelocyte %	0d	M,F	0-1
Atypical Lymphocyte %	0d	M,F	0-6
RETIC %	18y	M,F	0.5-2.2

Test	Reference Range		
	Age	Gender	Range
Sed Rate mm/Hr	0d	F	0-19
		M	0-14
	50y	F	0-29
		M	0-19
Infectious Mono	0d	M,F	Negative
FFN	0d	M,F	Negative

Coagulation

Test	Reference Range		
	Age	Gender	Range
PT	0d	M,F	9.5-12.8 sec.
INR	0d	M,F	0.85-1.14
PTT	0d	M,F	26.0-38.0 sec.
Fibrinogen	0d	M,F	238.0-498.0 mg/dL
D-Dimer	0d	M,F	< 243 ng/mL

Semen Analysis

Test	Reference Range		
	Age	Gender	Range
Volume	0d	M	1.5-5.0 mL
Total Motility	0d	M	≥40%
Progressive	0d	M	>31%
Sperm Count	0d	M	≥15 x10 ⁶ /mL

Urinalysis

Test	Reference Range		
	Age	Gender	Range
Color	0d	M,F	Yellow
Clarity	0d	M,F	Clear
Specific Gravity	0d	M,F	1.002-1.030
pH	0d	M,F	5.0-8.0
Urobilinogen	0d	M,F	Negative
Ketones	0d	M,F	Negative
Protein	0d	M,F	Negative
Leukocytes	0d	M,F	Negative
Blood	0d	M,F	Negative
Nitrite	0d	M,F	Negative
Bilirubin	0d	M,F	Negative
Glucose	0d	M,F	Negative
Miscoscopic			
Bacteria	0d	M,F	Absent/HPF
Crystals	0d	M,F	Absent/HPF
Casts	0d	M,F	Absent/LPF
Non-Squamous Epithelials	0d	M,F	Absent/HPF
Squamous Epithelial Cells	0d	M,F	Absent/HPF
Red Blood Cells	0d	M,F	Absent-Trace (0-2/HPF)
White Blood Cells	0d	M,F	Absent-Trace (0-5/HPF)

Body Fluid White Blood Cell Counts

Test	Reference Range		
	Age	Gender	Range
Synovial Fluid	0d	M,F	<150/ μ L
Peritoneal Fluid	0d	M,F	<500/ μ L
Pleural Fluid	0d	M,F	<500/ μ L
Pericardial Fluid	0d	M,F	<500/ μ L
Cerebrospinal Fluid (CSF)	0d	M,F	0-30/ μ L
	29d	M,F	0-5/ μ L
CSF Red Blood Cells	0d	M,F	0/ μ L

d=Days M=Male
 m=Months F=Female
 y=Years U=Unknown