

Age	RCC x10E12/L		Hb (Female) g/L		Hb (Male) g/L		HCT(Female) Ratio		HCT (Male) Ratio		MCV fl		MCH pg		RDW %		Platelets x10E9/L		Retic x10E9/L	
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
Cord	3.53	5.52	124	192	124	192	0.37	0.56	0.37	0.56	99	119	32	39	15.2	19.0	150	400		
1-6 Day	4.0	6.6	145	225	145	225	0.45	0.67	0.45	0.67	95	121	26	35	13.2	18.0	150	400		
7-13	3.6	5.2	135	215	135	215	0.42	0.66	0.42	0.66	88	126	26	35	13.2	18.0	150	400		
14-29	3.0	5.4	125	205	125	205	0.39	0.63	0.39	0.63	86	124	26	35	13.2	18.0	150	400		
1 m	2.9	4.8	93	158	93	158	0.27	0.46	0.27	0.46	89	100	28	34	13.2	17.5	150	650		
2-3 m	3.3	4.8	97	130	97	130	0.29	0.38	0.29	0.38	72	91	24	32	11.9	16.2	150	650		
4-5 m	4.0	5.3	105	136	105	136	0.31	0.40	0.31	0.40	69	84	22	29	12.0	16.0	150	575		
6-7 m	4.0	5.3	105	136	105	136	0.31	0.40	0.31	0.40	69	84	22	29	12.0	16.0	150	575		
8-9 m	4.0	5.3	105	136	105	136	0.31	0.40	0.31	0.40	69	84	22	29	12.0	16.0	150	575		
10-11 m	4.0	5.3	105	136	105	136	0.31	0.40	0.31	0.40	69	84	22	29	12.0	16.0	150	575		
1 year	4.0	5.4	105	140	105	140	0.32	0.41	0.32	0.41	70	86	23	29	12.0	15.5	150	500		
2 years	4.0	5.4	105	140	105	140	0.32	0.41	0.32	0.41	70	86	23	29	12.0	15.5	150	500		
3 years	4.0	5.4	105	140	105	140	0.32	0.41	0.32	0.41	70	86	23	29	12.0	15.5	150	500		
4 years	4.1	5.4	113	145	113	145	0.33	0.42	0.33	0.42	74	87	24	29	12.0	14.5	150	475		
5 years	4.1	5.4	113	145	113	145	0.33	0.42	0.33	0.42	74	87	24	29	12.0	14.5	150	475		
6 years	4.1	5.4	113	145	113	145	0.33	0.42	0.33	0.42	74	87	24	29	12.0	14.5	150	475		
7 years	4.1	5.4	113	145	113	145	0.33	0.42	0.33	0.42	74	87	24	29	12.0	14.5	150	475		
8 years	4.15	5.4	115	145	115	145	0.35	0.43	0.35	0.43	75	90	24	30	12.0	14.5	150	425		
9 years	4.15	5.4	115	145	115	145	0.35	0.43	0.35	0.43	75	90	24	30	12.0	14.5	150	425		
10 years	4.2	5.6	115	145	115	145	0.35	0.43	0.35	0.43	75	90	24	30	12.0	14.5	150	425		
11 years	4.2	5.6	115	145	115	145	0.35	0.43	0.35	0.43	75	90	24	30	12.0	14.5	150	425		
12 years	4.2	5.6	115	145	115	145	0.35	0.43	0.35	0.43	75	90	24	30	12.0	14.5	150	425		
13 years	4.4	5.7	115	150	125	160	0.35	0.44	0.37	0.47	78	93	25	31	12.0	15.0	150	400		
14 years	4.4	5.7	115	150	125	160	0.35	0.44	0.37	0.47	78	93	25	31	12.0	15.0	150	400		
15 years	4.4	5.7	115	150	125	160	0.35	0.44	0.37	0.47	78	93	25	31	12.0	15.0	150	400		
16+Adult	4.3 M 3.6 F	6.0 M 5.6 F	115	155	130	175	0.35	0.46	0.40	0.52	80	99	27	33	12.0	15.0	150	400	10	100
Antenatal	3.4	5.0	100	145			0.30	0.44			80	99	27	33	11.5	16.0	150	400		

Age	WCC x10E9/L		Immature Granulocytes x10E9/L		Neutrophils x10E9/L		Lymphs x10E9/L		Monocytes x10E9/L		Eosinophils x10E9/L		Basophils x10E9/L	
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
Cord	7.3	25.8	0.00	0.06	3.3	13.0	2.1	10.7	0.7	2.7	0.0	1.0	0.0	0.2
1-6 Day	9.4	34.0	0.00	0.06	5.0	26.4	2.0	11.5	0.5	1.7	0.2	0.7	0.0	0.2
7-13 d	5.0	21.0	0.00	0.06	6.5	16.5	2.0	17.0	0.3	1.3	0.2	0.8	0.0	0.2
14-29 d	5.0	20.0	0.00	0.06	1.0	13.0	2.0	17.0	0.5	1.8	0.2	0.6	0.0	0.2
1 m	5.8	13.0	0.00	0.06	0.5	3.9	3.7	8.0	0.5	1.5	0.0	0.9	0.0	0.2
2-3 m	6.6	15.0	0.00	0.06	0.8	4.7	4.2	10.6	0.4	1.3	0.0	0.9	0.0	0.2
4-5 m	6.4	17.0	0.00	0.06	0.9	5.9	3.5	11.5	0.3	1.5	0.0	0.9	0.0	0.2
6-7 m	6.4	17.0	0.00	0.06	0.9	5.9	3.5	11.5	0.3	1.5	0.0	0.9	0.0	0.2
8-9 m	6.4	17.0	0.00	0.06	0.9	5.9	3.5	11.5	0.3	1.5	0.0	0.9	0.0	0.2
10-11 m	6.4	17.0	0.00	0.06	0.9	5.9	3.5	11.5	0.3	1.5	0.0	0.9	0.0	0.2
1 year	5.0	14.5	0.00	0.06	1.0	7.0	2.0	8.0	0.3	1.3	0.0	0.9	0.0	0.2
2 years	5.0	14.5	0.00	0.06	1.0	7.0	2.0	8.0	0.3	1.3	0.0	0.9	0.0	0.2
3 years	5.0	14.5	0.00	0.06	1.0	7.0	2.0	8.0	0.3	1.3	0.0	0.9	0.0	0.2
4 years	4.5	12.0	0.00	0.06	1.5	8.0	1.4	5.7	0.3	1.0	0.0	1.0	0.0	0.2
5 years	4.5	12.0	0.00	0.06	1.5	8.0	1.4	5.7	0.3	1.0	0.0	1.0	0.0	0.2
6 years	4.5	12.0	0.00	0.06	1.5	8.0	1.4	5.7	0.3	1.0	0.0	1.0	0.0	0.2
7 years	4.5	12.0	0.00	0.06	1.5	8.0	1.4	5.7	0.3	1.0	0.0	1.0	0.0	0.2
8 years	4.3	12.0	0.00	0.06	1.5	7.0	1.4	4.5	0.3	0.9	0.0	0.9	0.0	0.2
9 years	4.3	12.0	0.00	0.06	1.5	7.0	1.4	4.5	0.3	0.9	0.0	0.9	0.0	0.2
10 years	4.3	12.0	0.00	0.06	1.5	7.0	1.4	4.5	0.3	0.9	0.0	0.9	0.0	0.2
11 years	4.3	12.0	0.00	0.06	1.5	7.0	1.4	4.5	0.3	0.9	0.0	0.9	0.0	0.2
12 years	4.3	12.0	0.00	0.06	1.5	7.0	1.4	4.5	0.3	0.9	0.0	0.9	0.0	0.2
13 years	4.2	10.0	0.00	0.06	1.8	7.0	1.4	4.0	0.3	0.9	0.0	0.8	0.0	0.2
14 years	4.2	10.0	0.00	0.06	1.8	7.0	1.4	4.0	0.3	0.9	0.0	0.8	0.0	0.2
15 years	4.2	10.0	0.00	0.06	1.8	7.0	1.4	4.0	0.3	0.9	0.0	0.8	0.0	0.2
16+Adult	4.0	11.0	0.00	0.06	1.9	7.5	1.0	4.0	0.2	1.0	0.0	0.5	0.0	0.2
Antenatal	5.0	14.5	0.00	0.06	1.9	11.0	1.0	4.0	0.2	1.0	0.0	0.5	0.0	0.2

NINETY FIFTH PERCENTILE RANGES FOR HAEMATOLOGICAL VARIABLES DURING PREGNANCY

Period of Gestation	First Trimester	Second Trimester	Third Trimester
RBC x 10 ¹² /L	3.52-4.52	3.2-4.41	3.1-4.44
Hbg/L	110-143	100-137	98-137
PCV L/L	0.31-0.41	0.3-0.38	0.28-0.39
MCV fL	81-96	82-97	91-99
WBC x 10 ⁹ /L	5.7-13.6	6.2-14.8	5.9-13.7
Neutrophil Count x 10 ⁹ /L	3.6-10.1	3.8-12.3	3.7-10.8
Lymphocyte Count x 10 ⁹ /L	1.1-3.5	0.9-3.9	1-3.1
Monocyte Count x 10 ⁹ /L	0-1	0.1-1.1	0.3-1.1
Eosinophil Count x 10 ⁹ /L	0-0.6	0-0.6	0.02-0.33
Basophil Count x 10 ⁹ /L	0-0.1	0-0.1	0-0.09
Platelet Count x 10 ⁹ /L	174-391	171-409	155-429

Pregnancy related ranges:- All data derived from Balloch AI and Cauchi (1993) Clin Lab Haematology Journal 15 pg 7-14, except for WBC parameters from England JM and Bain BJ (1976) British Journal of Haematology 33, pg 1-7.

Adult Reference Intervals are those of the Northern and Southern Haematology QA Groups

Paediatric Reference Intervals are those derived at Princess Margaret Children's Hospital

Last updated October 2021