

PEDIATRIC REFERENCE INTERVALS

Albumins ¹ Specimen Type: Serum		
Age	Male (g/dL)	Female (g/dL)
0- <15 days	3.3-4.5	3.3-4.5
15 days- <1 year	2.8-4.7	2.8-4.7
1- <8 years	3.8-4.7	3.8-4.7
8- <15 years	4.1-4.8	4.1-4.8
15- <19 years	4.1-5.1	4-4.9
ALT (Alanine Aminotransferase) ² Specimen Type: Serum		
Age	Male (U/L)	Female (U/L)
0- <1 year	5-33	5-33
1- <13 years	9-25	9-25
13- <19 years	9-24	8-22
ALP (Alkaline Phosphatase) ³ Specimen Type: Serum		
Age	Male (U/L)	Female (U/L)
1- <15 days	90-273	90-273
15 days- <1 year	134-518	134-518
1- <10 years	156-369	156-369
10- <13 years	141-460	141-460
13- <15 years	127-517	62-280
15- <17 years	89-365	54-128
17- <19 years	59-164	48-95
Bilirubin, total- Male and Female ⁴ Specimen Type: Serum		
Age	mg/dL	
0- <15 days	0.19-16.6	
15 days- <1 year	0.05-0.68	
1- <9 years	0.05-0.4	
9- <12 years	0.05-0.55	
12- <15 years	0.10-0.70	
15- <19 years	0.10-0.84	

Calcium- Serum Male and Female ⁵ : Specimen Type: Serum		
Age	Mg/dL	
0- <1 year	8.5-11.0	
1- <19 years	9.2-10.5	
Carbon Dioxide CO ₂ ⁶ Specimen Type: Serum		
Age	Male (mmol/L)	Female (mmol/L)
0- <15 days	5-20	5-20
15 days- <1 year	10-24	10-24
1- <5 years	14-24	14-24
5- <15 years	17-26	17-26
15- <19 years	18-28	17-26
Chloride ⁷ Specimen Type: Serum		
Age	Male (mmol/L)	Female (mmol/L)
3- <6 years	100-107	100-107
6- <12 years	101-107	101-107
12- <30 years	101-106	100-107
C-Reactive Protein (CRP) Male and Female ⁸ Specimen Type: Serum		
Age	mg/L	
0- <15 days	0.3-6.1	
15 days- <15 years	0.1-1.0	
15- <19 years	0.1-1.7	
Creatine Kinase (CK) ⁹ Specimen Type: Serum		
Age	Male (U/L)	Female (U/L)
6 months- <3 years	50-272	38-260
3- <6 years	59-296	42-227
6- <9 years	54-275	50-231
9- <12 years	55-324	52-256
12- <15 years	63-407	45-257
15- <18 years	68-914	45-458

Creatinine ¹⁰ Specimen Type: Serum		
Age	Male (mg/dL)	Female (mg/dL)
0-14 days	0.32-0.92	0.32-0.92
15 days- <2 years	0.1-0.36	0.1-0.36
2- <5 years	0.2-0.43	0.2-0.43
5- <12 years	0.31-0.61	0.31-0.61
12- <15 years	0.45-0.81	0.45-0.81
15- <19 years	0.62-1.08	0.49-0.84
Glucose Male and Female ¹¹ Specimen Type: Serum		
Age	mg/dL	
3- <6 years	75-111	
6- <12 years	73-91	
12- <20 years	75-93	
Magnesium ¹² Specimen Type: Serum		
Age	Male (mg/dL)	Female (mg/dL)
0-90 days	1.4-2.1	1.5-2.0
91 days-12 months	1.6-2.5	1.6-2.2
13 months-3 years	1.6-2.2	1.5-2.2
4 y-10 years	1.5-2.2	1.6-2.5
11-15 years	1.3-2.0	1.6-2.1
16-18 years	1.6-2.1	1.5-1.9
Potassium Male and Female ¹³ Specimen Type: Serum		
Age	mmol/L	
3- <6 years	3.9-4.6	
6- <80 years	3.8-4.9	
Protein, Total Male and Female ¹⁴ Specimen Type: Serum		
Age	g/dL	
0- <15 days	5.3-8.3	
15 days- <1 year	4.4-7.1	
1- <6 years	6.1-7.5	
6- <9 years	6.4-7.7	
9- <19 years	6.5-8.1	

Sodium Serum Male and Female ¹⁵ Specimen Type: Serum		
Age	mmol/L	
3- <6 years	135-142	
6- <16 years	136-143	
High-Density Lipoprotein Cholesterol (HDL-C) ¹⁶ Specimen Type: Serum		
Age	Male (mg/dL)	Female (mg/dL)
0-14 days	15-42	15-42
15- <1 year	12-71	12-71
1- <4 years	32-63	32-63
5- <13 years	36-73	36-73
13- <19 years	32-68	32-72
Low-Density Lipoprotein-Cholesterol (LDL-C) ¹⁷ : Male and Female Specimen Type: Serum		
Age	mg/dL	
0- <1 year	31-135	
1-20 years	50-155	
Iron ¹⁸ : Male and Female Specimen Type: Serum		
Age	µg/dL	
0-1 year	20-153	
1-5 years	9-151	
6-10 years	6-148	
11-14 years	19-156	
15-20 years	14-156	
Total Iron Binding Capacity ¹⁹ Specimen Type: Serum/Plasma		
Age	Male (µg/dL)	Female (µg/dL)
0-90 days	155-330	165-275
91 days-1 year	150-380	250-455
1 year-3 years	215-420	160-415
4-10 years	185-415	260-385
11-14 years	265-410	250-420
15-18 years	270-415	285-410

The information in this chart was updated by MLO Staff based on *Pediatric Reference Intervals*, 8th Edition. The reviewed chemistries are comparable to those listed in MLO's original Pediatric Reference Intervals chart, last updated in 2022.

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