

Updated Hemoglobin Fractionation and Quantification Reference Ranges

Effective **August 27th, 2026**, the Clinical Immunology Laboratory has updated age-specific reference intervals for the Hemoglobin Fractionation and Quantification testing to better reflect expected ranges for pediatric patients <2 years of age. This update comes following a review of the literature and established reference intervals at multiple reference laboratories. No changes have been made to test ordering or test methodology.

Age	Hemoglobin A (%)	Hemoglobin F (%)	Hemoglobin A2 (%)
0 to <1 month	5.9 - 54.8	46.0 - 92.0	0.0 - 1.5
1 to <4 months	12.9 - 96.6	4.2 - 56.9	0.0 - 3.1
4 to <12 months	43.0 - 98.0	0.5 - 11.6	0.8 - 3.5
12 months to <2 years	85.1 - 98.0	0.0 - 8.5	2.0 - 3.5
≥2 years	95.8 - 98.0	0.0 - 2.0	2.0 - 3.5

All ages: Hemoglobin S, Hemoglobin C or other Variant Hemoglobin → 0.0%

If you have questions regarding any aspect of these changes, please contact the Immunology Director, Justin Dalton, MD, at pager 3162 or the laboratory at 628-4000.