

**BLOOD SCIENCES
DEPARTMENT OF HAEMATOLOGY**

Title of Document: Reference Ranges for Coagulation Tests
Q-Pulse Reference N°: HAWE/009

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Version N°: 3



Reference Ranges for Coagulation Tests – Routine

	Patient age							
	0-28 days	1-5 months	6-11 months	1-5 years	6-10 years	11-17 years	≥18-50 years	>50 years
PT (s)	9.5 - 12.6	9.7 - 12.8	9.8 - 13.0	9.9 - 13.4	10.0 - 14.6	10.0 - 14.1	9.5 - 13.0	9.5 - 13.0
APTT (s)	28 - 46	25 - 41	25 - 41	24 - 39	27 - 39	25 - 38	25 - 37	25 - 37
Fibrinogen (g/L)	1.4 - 3.0	1.4 - 4.4	1.5 - 3.7	1.6 - 5.0	1.7 - 5.4	1.7 - 5.3	2.0 - 4.0	2.0 - 4.0
D-Dimer (µg/L)	≤1200	≤878	≤844	≤780	≤567	≤580	≤500	≤10 µg/L x age in years

AGE	INR
0-150 years	0.8-1.2

Reference Range reviewed from April 2023 due to change in equipment to Werfen ACL TOPs 750.

Adult ranges were verified and adapted from the manufacturer's reference range (Werfen)

Paediatric ranges were adapted from the following study:

Toulon P, Berruyer M, Brionne-François M, Grand F, Lasne D, Telion C, Arcizet J, Giacomello R, De Pooter N. Age dependency for coagulation parameters in paediatric populations. Results of a multicentre study aimed at defining the age-specific reference ranges. Thromb Haemost. 2016 Jul 4;116(1):9-16. doi: 10.1160/TH15-12-0964. Epub 2016 Mar 17. PMID: 26988943.

PLEASE NOTE: Results for infants 0-14 days should be interpreted with caution, as the study above did not include this age group.

D-Dimer: Change in unit of reporting from µg/mL to µg/L (age-adjusted range still applies)

Reference Ranges for Coagulation Tests – Specialist

	Patient age						
	0-28 days	1-5 months	6-11 months	1-5 years	6-10 years	11-17 years	≥18 years
Factor II (IU/mL)	0.45 - 0.74	0.47 - 1.11	0.74 - 1.17	0.49 - 1.30	0.68 - 1.32	0.48 - 1.19	0.79 - 1.31
Factor V (IU/mL)	0.69 - 1.24	0.60 - 1.47	0.59 - 1.60	0.73 - 1.88	0.82 - 1.41	0.62 - 1.25	0.62 - 1.39
Factor VII (IU/mL)	0.55 - 1.08	0.43 - 1.41	0.55 - 1.28	0.48 - 1.24	0.55 - 1.35	0.55 - 1.33	0.50 - 1.29
Factor VIII (IU/mL)	0.65 - 1.53	0.50 - 1.87	0.53 - 1.32	0.59 - 1.67	0.61 - 1.54	0.43 - 1.55	0.50 - 1.50
Factor IX (IU/mL)	0.30 - 0.77	0.29 - 1.05	0.51 - 1.07	0.53 - 1.29	0.55 - 1.56	0.60 - 1.38	0.65 - 1.50
Factor X (IU/mL)	0.66 - 0.92	0.68 - 1.22	0.76 - 1.34	0.60 - 1.53	0.71 - 1.62	0.64 - 1.31	0.77 - 1.31
Factor XI (IU/mL)	0.33 - 0.75	0.28 - 1.26	0.61 - 1.26	0.58 - 1.54	0.32 - 1.54	0.55 - 1.39	0.65 - 1.50
Factor XII (IU/mL)	0.25 - 0.81	0.38 - 1.37	0.48 - 1.56	0.50 - 1.75	0.49 - 1.54	0.49 - 1.54	0.50 - 1.50
Factor XIII (IU/mL)	0.78 - 1.00	0.55 - 1.33	0.51 - 1.37	0.49 - 1.37	0.54 - 1.42	0.64 - 1.33	0.75 - 1.55
Antithrombin (IU/mL)	0.33 - 0.63	0.29 - 1.20	0.63 - 1.22	0.61 - 1.28	0.64 - 1.36	0.69 - 1.36	0.83 - 1.28
Protein C (IU/mL)	0.27 - 0.48	0.23 - 0.95	0.47 - 1.51	0.59 - 1.48	0.46 - 1.54	0.72 - 1.55	0.70 - 1.40
Protein S (IU/mL)	0.61 - 1.08	0.48 - 1.27	0.63 - 1.39	0.53 - 1.35	0.62 - 1.42	0.61 - 1.31	0.58 - 1.23
vWF Act (IU/mL)	0.74 - 1.89	0.41 - 1.91	0.43 - 1.76	0.44 - 1.56	0.41 - 1.29	0.54 - 1.37	0.40 - 1.63
vWF Ag (IU/mL)	0.46 - 2.20	0.36 - 2.17	0.48 - 1.99	0.41 - 1.86	0.45 - 1.41	0.56 - 1.23	0.42 - 1.76
vWF Ricof (IU/mL)	0.88 - 1.22	0.33 - 1.54	0.37 - 1.19	0.41 - 1.32	0.42 - 1.63	0.45 - 1.39	0.48 - 2.40