



## Hematology (Complete Blood Count) Reference Ranges

	Conventional Units (USA)	SI Units	Dog	Cat	Cow	Horse	Pig	Sheep	Goat	Rabbit
PCV	%	$\times 10^{-2}$ L/L	35–57	30–45	24–46	27–43	32–50	27–45	22–38	30–50
Hgb	g/dL	$\times 10$ g/L	11.9–18.9	9.8–15.4	8–15	10.1–16.1	10–16	9–15	8–12	8–15
RBCs	$\times 10^6$ /mCL	$\times 10^{12}$ /L	4.95–7.87	5.0–10.0	5.0–10.0	6.0–10.4	5–8	9–15	8–18	4–7
Reticulocytes	%	%	0–1.0	0–0.6			0–1.0			
Absolute reticulocyte count	$\times 10^3$ /mCL	$\times 10^9$ /L	< 80	< 60						
MCV	fL	fL	66–77	39–55	40–60	37–49	50–68	28–40	16–25	58–67
MCH	pg	pg	21.0–26.2	13–17	11–17	13.7–18.2	17–21	8–12	5.2–8	17.1–23.5

	Conventional Units (USA)	SI Units	Dog	Cat	Cow	Horse	Pig	Sheep	Goat	Rabbit
MCHC	g/dL	× 10 <sup>3</sup> g/L	32.0– 36.3	30– 36	30– 36	35.3– 39.3	30– 34	31–34	30– 36	29–37
Platelets	× 10 <sup>3</sup> /mCL	× 10 <sup>9</sup> /L	211– 621	300– 800	100– 800	117– 256	200– 500	800– 1,100	300– 600	250– 650
MPV	fL	fL	6.1– 10.1	12– 18	3.5– 6.5	4.0– 6.0				
WBCs	× 10 <sup>3</sup> /mCL	× 10 <sup>9</sup> /L	5.0– 14.1	5.5– 19.5	4.0– 12.0	5.6– 12.1	11– 22	4–8	4–13	6–12
Neutrophils	%	%	58– 85	45– 64	15– 33	52–70	28– 47	10–50	30– 48	20–60
(segmented)	× 10 <sup>3</sup> /mCL	× 10 <sup>9</sup> /L	2.9– 12.0	2.5– 12.5	0.6– 4.0	2.9– 8.5	2–15	0.7– 6.0	1.0– 7.2	1–9.4
Neutrophils	%	%	0–3	0–2	0–2	0–1	0–4	0	rare	
(band)	× 10 <sup>3</sup> /mCL	× 10 <sup>9</sup> /L	0– 0.45	0– 0.3	0– 0.1	0–0.1	0– 0.8	Rare	Rare	
Lymphocytes	%	%	8–21	27– 36	45– 75	21–42	39– 62	40–55	50– 70	30–85
	× 10 <sup>3</sup> /mCL	× 10 <sup>9</sup> /L	0.4– 2.9	1.5– 7.0	2.5– 7.5	1.2– 5.1	3.8– 16.5	2–9	2–9	1.6– 10.6

	Conventional Units (USA)	SI Units	Dog	Cat	Cow	Horse	Pig	Sheep	Goat	Rabbit
Monocytes	%	%	2–10	0–5	0–8	0–6	2–10	0–6	0–4	1–4
	$\times 10^3/\text{mCL}$	$\times 10^9/\text{L}$	0.1–1.4	0–0.9	0–0.9	0–0.7	0–1	0–0.75	0–0.55	0.05–0.5
Eosinophils	%	%	0–9	0–4	0–20	0–7	0.5–11	0–10	1–8	1–4
	$\times 10^3/\text{mCL}$	$\times 10^9/\text{L}$	0–1.3	0–0.8	0–2.4	0–0.8	0–1.5	0–1	0.05–0.65	0.05–0.5
Basophils	%	%	0–1	0–1	0–2	0–2	0–2	0–3	0–1	1–5
	$\times 10^3/\text{mCL}$	$\times 10^9/\text{L}$	0–0.14	0–0.2	0–0.2	0–0.3	0–0.5	0–0.3	0–0.12	0.05–0.9
M:E			0.75–2.5	0.6–3.9	0.3–1.8	0.5–1.5	1.2–2.2	0.77–1.7	0.7–1.0	
Plasma proteins	g/dL	10 g/L	6.0–7.5	6.0–7.5	6.0–8.0	6.0–8.5	6–8	6–7.5	6–7.5	5.4–8.3
Plasma fibrinogen	mg/dL	g/L	150–300	150–300	100–600	100–500	200–400	100–500	100–400	200–400