

## Pallor vs Anaemia

Pale mucous membranes (pallor) can occur for reasons other than anaemia. Conditions that increase sympathetic tone producing vasoconstriction as seen in cardiac disease, hypovolaemia, pain, fear and marked stress can also produce pale membranes.

Some species, particularly ruminants and occasionally cats have low red blood cell mass when healthy and can appear pale in the absence of either anaemia or increased sympathetic tone.

Within species there are age and breed related differences in red blood cell parameters, and anaemia may be misdiagnosed as absent or present if the incorrect reference interval is used.

Once anaemia is identified, it is further categorised (except in horses) as being regenerative or non-regenerative depending upon the number of reticulocytes in circulation. Reference intervals for reticulocyte counts vary substantially, with analyser results considered less accurate than those from a new methylene blue (NMB) stained blood smear examination. Consequently, if you see a high reticulocyte count with or without anaemia, or anaemia without an increase in reticulocytes in your clinic analyser results, confirm the findings with an examination of a NMB stained blood smear.



Young animals often have lower RBC parameters than adults