

EPIPHYSEAL PLATE CLOSURE IN DOGS

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<http://www.provet.co.uk/health/diagnostics/growthplatedogs.htm>

This information is provided by Provet for educational purposes only.

You should seek the advice of your veterinarian if your pet is ill as only he or she can correctly advise on the diagnosis and recommend the treatment that is most appropriate for your pet.

In evaluating radiographs of the skeleton of young animals it is important to know the usual closure times of growth plates in order to decide whether there is premature, or delayed closure.

The following tables list the range and average closure times (in days after birth) reported by different authors worldwide.

The range of time reported for closure can be quite great making interpretation for any individual animal difficult.

Growth Plate	Closure - Range (days)	Closure - Average (days)
FORELIMB		
Tuber scapulae	117-210	186
Proximal humeral epiphysis	273-465	375
Medial and lateral humeral condyles	138-236	187
Medial humeral epicondyle	187-240	216
Proximal radial epiphysis	136-330	258
Distal radial epiphysis	136-510	318
Proximal ulnar epiphysis	161-450	258
Distal ulnar epiphysis	217-450	308
Intermediate and radial carpal bones		101
Central carpal bone		110
Epiphysis of accessory bone	113-180	135
Proximal metacarpal epiphysis		145
Distal metacarpal epiphysis II-V	165-240	203
Proximal phalangeal epiphysis I		141
Proximal phalanx proximal epiphysis II-V	131-224	186
Middle phalanx. proximal epiphysis II-V	131-224	183
PELVIS		
Acetabulum		112
Ilium		112
Ischium		112
Pubis		112
Tuber ischii		292
HINDLIMB		
Femoral head	129-540	320
Femur - greater trochanter	129-540	320
Femur - lesser trochanter	129-360	269
Distal femoral epiphysis	136-392	330
Tibial condyles	143-413	322
Tibial tuberosity	143-435	249
Distal tibial epiphysis	136-495	313
Medial tibial malleolus		138
Proximal fibular epiphysis	136-360	297
Distal fibular epiphysis	136-495	288
Fibular tarsal bone		159
Tarsal bones III and IV		101
Distal metatarsal epiphysis II-V	165-270	217
Proximal phalangeal epiphysis II-V	161-210	187
Middle phalanx - proximal epiphysis II-V	161-210	187