

The process of converting the growth plates to bone goes from the bottom of the animal up. In other words, the lower down toward the hoofs you look, the earlier the growth plates will have fused; and the higher up toward the animal's back you look, the later. The growth plate at the top of the coffin bone (the most distal bone of the limb) is fused at birth. What that means is that the coffin bones get no taller after birth (they get much larger around, though, by another mechanism). That's the first one. In order after that:

- Short pastern - top and bottom between birth and 6 months.
- Long pastern - top and bottom between 6 months and one year.
- Cannon bone - top and bottom between 8 months and 1.5 years
- Small bones of the knee - top and bottom of each, between 1.5 and 2.5 years
- Bottom of radius-ulna - between 2 and 2.5 years
- Weight-bearing portion of glenoid notch at top of radius - between 2.5 and 3 years
- Humerus - top and bottom, between 3 and 3.5 years
- Scapula - glenoid or bottom (weight-bearing) portion – between 3.5 and 4 years
- Hindlimb - lower portions same as forelimb
- Hock - this joint is "late" for as low down as it is; growth plates on the tibial and fibular tarsals don't fuse until the animal is four (so the hocks are a known "weak point" - even the 18th-century literature warns against driving young horses in plow or other deep or sticky footing, or jumping them up into a heavy load, for danger of spraining their hocks).
- Tibia - top and bottom, between 3 and 3.5 years
- Femur - bottom, between 3 and 3.5 years; neck, between 2.5 and 3 years; major and 3rd trochanters, between 2.5 and 3 years
- Pelvis - growth plates on the points of hip, peak of croup (tubera sacrale), and points of buttock (tuber ischii), between 3 and 4 years.

And what do you think is last? The vertebral column, of course. A normal horse has 32 vertebrae between the back of the skull and the root of the dock, and there are several growth plates on each one, the most important of which is the one capping the centrum. These do not fuse until the horse is at least 5 ½ years old (and this figure applies to a small-sized, scrubby, range-raised mare. The taller your horse and the longer its neck, the later the last fusions will occur. And for a male - is this a surprise? - you add six months. So, for example, a 17-hand Thoroughbred or Saddlebred or Warmblood gelding may not be fully mature until his 8th year - something that owners of such individuals have often told me that they "suspected").