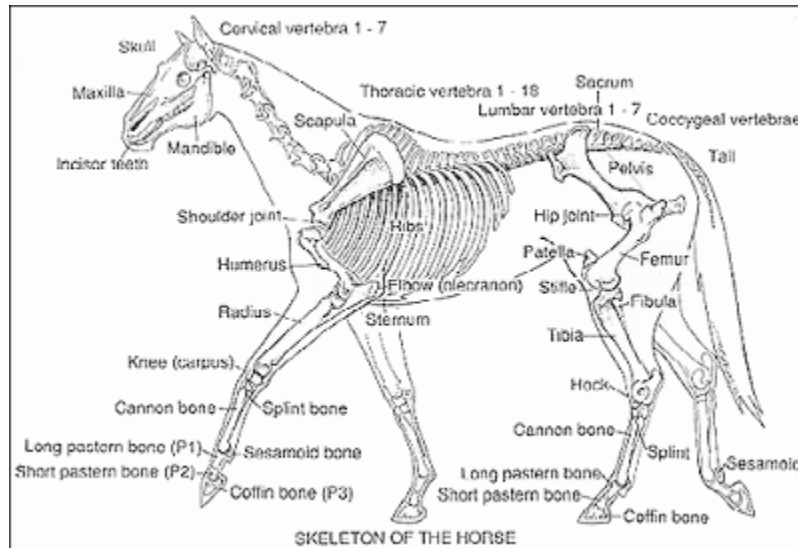


THE SKELETAL SYSTEM



Horses typically have around 205 bones. Every movement made involves the skeletal system and the skeletal system works in close contact with the muscular system and ligaments (hold bone to bone).

Bones to know (besides the required legs):

Skull: maxilla, mandible, hyoid apparatus (bonus)

Spine: cervical spine (7), thoracic spine (18), lumbar spine (6), sacrum (5), coccygeal spine (18-23)

Ribs (18 pr.)

Sternum

Functions:

1. to give shape to the body
2. to protect major organs including brain, lungs, heart etc.
3. to work with muscles to provide movement
4. to produce blood cells in the bone marrow

Diseases related to Skeletal System (excluding conformation and lameness):

Laminitis:

Causative agent:

endotoxins – colic, grain overload, retained placenta

mechanical – injury to opposite leg

inappropriate inflammatory response – fever immune-mediated

metabolic – Cushings, Equine Metabolic Syndrome

other – ponies, administration of high corticosteroid dose

Signs:

rocking back onto hind legs, leading with heels, increased digital pulse

Treatment:

Ice feet, NSAIDS, special shoeing to reduce pull on flexor tendons and make breakover at toe easier