Center of Gravity

Every living thing has a center of gravity and as they move, the center of gravity moves. The horse’s center of gravity is located behind the wither at the lowest part of the back. A horse (at a standstill) carries approximately 60% of his weight on the forelegs and approximately 40% on the hind legs. As a horse speeds up, its center of gravity moves forward and as it slows down or collects its center of gravity shifts back. The horse’s neck and head also affect the center of gravity. As the head and neck are raised, the center of gravity moves back and when the horse moves with its head and neck lowered, the center of gravity moves forward.

Defects in Movement

Over-reaching - is when the toe of the hind leg “grabs” the heels of the forelegs. This can cause serious injury, usually to the heels or the tendons. This can happen in high energy sports when the hind leg extends too much or the front leg doesn’t extend enough.

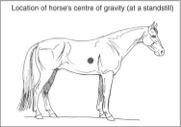
Forging **-** the hind foot striking the sole of the front foot as a horse trots is called forging. Horses wearing shoes will make a distinctive sound if they have this fault when they travel. Forging happens when a horse advances its hind foot too quickly or lifts its front leg too slowly. Young inexperienced horses will sometimes do this, or it can be a sign of laziness (especially in the front end), lack of condition or fatigue.

Interfering **-** associated with horse toeing out. Horse usually base narrow and/or thin chested.

Plaiting **-** is when a horse places its front feet directly or almost directly in front of each other (like walking a tight rope). A horse that plaits often has conformation faults (base narrow) and may be subject to stumbling.

Winging **-** is when the foot wings in to the inside and then lands to the outside of the straight track. A horse may strike itself when it wings and it places extra stress on the inside of the horse’s leg as it lands outside rather than straight.

Paddling **-** the foot paddling out to the outside and then landing to the inside of the straight track is called paddling. It rarely causes interference but it does place extra stress on the outside of the leg. Horses that toe in (conformation fault) often paddle when they travel.



Defects in Movement







