

Middle California Region USPC
Preparing For Your C-3 Test
Health Care & Veterinary Knowledge: Conformation

For the C-3 test, The USPC C-3 Standard requires that the candidate:

- **Describe good and bad points of conformation of own mount, to include body and legs.**
- **Discuss conformation faults which might be associated with the following types of movement: brushing, overreaching, forging, paddling, winging, and interfering.**
- **Know what conformation points might contribute to the following blemishes or unsoundnesses; bowed tendon, curb, ringbone, sidebone, navicular, bone spavin, bog spavin, thoroughpin, and splint.**

Some questions to consider for the C-3 test:

- Curb is an injury to what part of a horse?
- What causes ringbone in a horse?
- What is name of the bony lump or growth in the pastern, just above the coronary band?
- Where would a bowed tendon be located?
- What conformation fault makes a horse more likely to get a bowed tendon?
- Where would sidebone be found?
- What is a soft swelling on the front of the hock called?
- What type of lameness occurs in the sensitive structures ling the hoof?
- If your horse's tendon sheath above the point of the hock is swollen, what is this most likely to be?
- Low ringbone usually occurs in a horse with what conformation?
- What type of problems with a horse with sickle hocks be more likely to develop?
- What condition does a horse have when the cartilage of the coffin bone turns to bone?
- What is paddling?
- What unsoundnesses can short, steep pasterns cause?

The Horse's Balance and Movement

When standing still, about 55 percent of a horse's weight is carried on his front legs and about 45 percent on his hind legs. His center of gravity is an imaginary balance point located close to his heart girth line. As a horse moves, his balance changes. When he carries more weight on his forehead, his center of gravity shifts forward. When he tucks his hindquarters under himself, he shifts his balance and center of gravity backward.

The horse's head on neck are especially important in changing his balance. When he carries his head forward and down, it moves his balance forward. Raising his head and neck shifts his balance backward.

A horse is a rear-engined animal; that is, his power comes from his hindquarters. At each stride, his hind legs reach forward (engage), push against the ground, and move him forward; and his legs reach out and carry his weight.

When a horse moves well, his legs move straight, without swinging sideways or striking each other. He moves with good engagement (reaching well forward with his hind legs), for power and good balance. His legs (especially front legs) absorb shock, or concussion, so he moves smoothly.

Good conformation makes it easier for a horse to move and carry a rider in good balance. A horse should have a well-balanced appearance: No part should look too large or too small, and all parts should blend smoothly into each other. His legs should be in proportion to his body, not extremely long or short. His neck should be long enough for good balance, and his head should not be too large.

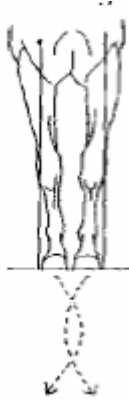
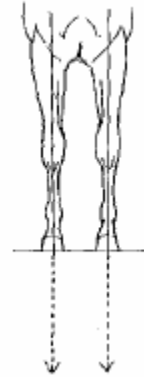
A horse's body should appear fairly level from the neck back so that his rump is not higher than his withers. Horse built low in front and high in behind tend to carry too much weight on their forehands, which makes them hard to balance and can put extra stress on their front legs.

Foreleg Conformation

Good Foreleg Conformation (front)

Good forelegs viewed from the front should be straight and parallel, not too close together or too far apart. This lines the bones up properly so that each leg moves straight, and helps distribute concussion (shock) evenly.

You should be able to drop a plumb line evenly through each leg from the point of shoulder pass through the middle of the forearm, knee, cannon bone, fetlock joint, pastern and foot..



Base Narrow

The legs are closer together at the feet than at the chest, inside the plumb line. This increases the stress on the outsides of the feet and legs, leading to splints or ringbone. It also causes movement problems such as plaiting and interfering.

Base Wide

The legs are farther apart at the feet than they are at the chest, outside the plumb line. This is often caused by a narrow chest, and puts extra stress on the insides of the feet and legs, leading to splints or ringbone.



Bench Knees

The cannon bones are offset and do not line up exactly with the center of the knees, instead set slightly to the outside. This puts extra weight and concussion on the inside of the lower leg, potentially causing splints or ringbone.

Bowed Knees

Bowed knees bend outward, so that the knees are outside the plumb line. This makes the legs weaker, and puts extra stress on the knees and on the outside of the legs.



Knock-knees

Knock knees bend inward so that the knees are inside the plumb line. This puts extra stress on the knees and on the inside of the legs, putting the horse at risk for carpalis, splints and ringbone.

Toes In (Pigeon-toed)

The toes point inward instead of straight ahead. This puts uneven weight on the outside of the hooves and legs, possibly leading to splints or ringbone. It also causes the horse to swing the feet inward while moving, called paddling.



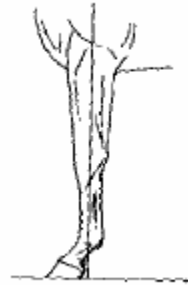
Toes Out (Splay-footed)

The toes point outward instead of straight ahead, putting uneven weight on the inside of the legs and contributing to splints or ringbone. It also causes a movement called winging in, where each foot swings towards the opposite leg. This may cause interference and lameness.

Good Foreleg Conformation (side)

A horse's front legs reach out and carry his weight and absorb concussion (shock) at every stride. To do this well, they must be strong and well developed and set under him properly.

A good foreleg viewed from the side should be straight and balanced. You should be able to drop a plumb line from the center of the shoulder blade, down the middle of the leg, to the fetlock joint. Half of the leg should be in front of the plumb line and half behind it.



Camped Out in Front

Most of the foreleg is in front of the plumb line, with the leg out in front of the horse. This puts extra stress on the flexor tendon and heels.



Long, Flat Pastern

Long, flat pasterns are weak and prone to injury. They may allow the fetlock joint to strike the ground when under stress, and may increase the pressure on the tendons.



Knee-sprung (Over at the knee)

The knee looks slightly bent, putting the lower leg too far under the horse. This puts extra stress on the knee and tendons, and in severe cases may cause stumbling.



Short, Steep Pastern

A short, upright pastern does not absorb shock well. It produces a shortened stride and a rougher gait, and may contribute to common unsoundnesses caused by concussion, such as ringbone, sidebone, and navicular.



Standing Under

Most of the foreleg is behind the plumb line, tipping the horse's weight forward. This causes him to move on the forehand, and may lead to stumbling.

Tied In Below Knee

Small, weak tendons which look as though they are squeezed right below the knee are weak and poorly developed, and easily prone to injury.



Hind Leg Conformation

Good Hind Leg Conformation (rear view)

The hind legs must be lined up properly so that the horse can move straight. However, correct hind legs are not straight in quite the same way as front legs. The stifles must point out a little so that the horse can swing his hind legs forward without hitting his belly. The hocks and lower legs should be parallel and straight up and down, and the hind legs must not be too close or too wide apart.



Bowed Hocks

Bowed hocks point outward, with the cannon bones slanting inward. This puts extra stress on the hocks and the inside of the hoof and legs, which may develop into bone spavin, bog spavin or thoroughpin.



Cow Hocks

Cow hocks point in towards each other, with the cannon bones slanting outward. This puts extra stress on the inside of the hocks, contributing to bone spavin, bog spavin or thoroughpin.

Wide Behind

Hind legs placed too far apart are a type of base wide conformation, even though they may appear straight. This limits the reach of the hind legs and gives the horse a shorter stride; in severe cases, increased concussion can cause ringbone.





Narrow Behind

Hind legs placed too close together are often underdeveloped, making them weaker and prone to strains. They also can cause interfering, which may lead to injury or lameness.

Good Hind Leg Conformation (side view)

A horse gets his pushing power from his hind legs. The hind legs must reach forward under his body (engage) at every stride, which provides the ground-covering pushing power. He also uses his hindquarters to balance himself in stops, turns, transitions, and collected gaits. Good hind leg conformation gives a horse strength, power, and better balance.

When viewing good hind legs from the side, you should be able to drop a plumb line from the point of buttock to the back of the hock and down the bag of the leg to the ground. The cannon bones should be vertical.

When you look at the hind legs from the side, the cannon bones should be vertical, and a vertical line (plumb line) from the point of the buttock should run down the back of the hock and leg down to the fetlock joint. This gives the bones of his hind legs the best angles for strength and good movement.



Post Leg

The leg is too straight through the hock and the stifle, putting the whole leg in front of the plumb line from the point of buttock. This increases the stress on the whole leg, especially the hock and the pastern. Post leg may cause bone spavin, bog spavin or thoroughpin.

Sickle Hock

The hocks are slightly bent (in the shape of a farmer's sickle) with the legs in front of the plumb line. This increases stress on the hocks, putting the horse at risk for curbs, bog spavin, thoroughpin or bone spavin.



Camped Out Behind

The hind leg is set behind the plumb line dropped from the point of buttock. Camped out hind legs are weaker, and the horse will have difficulty engaging his hind end, resulting in a loss of power.